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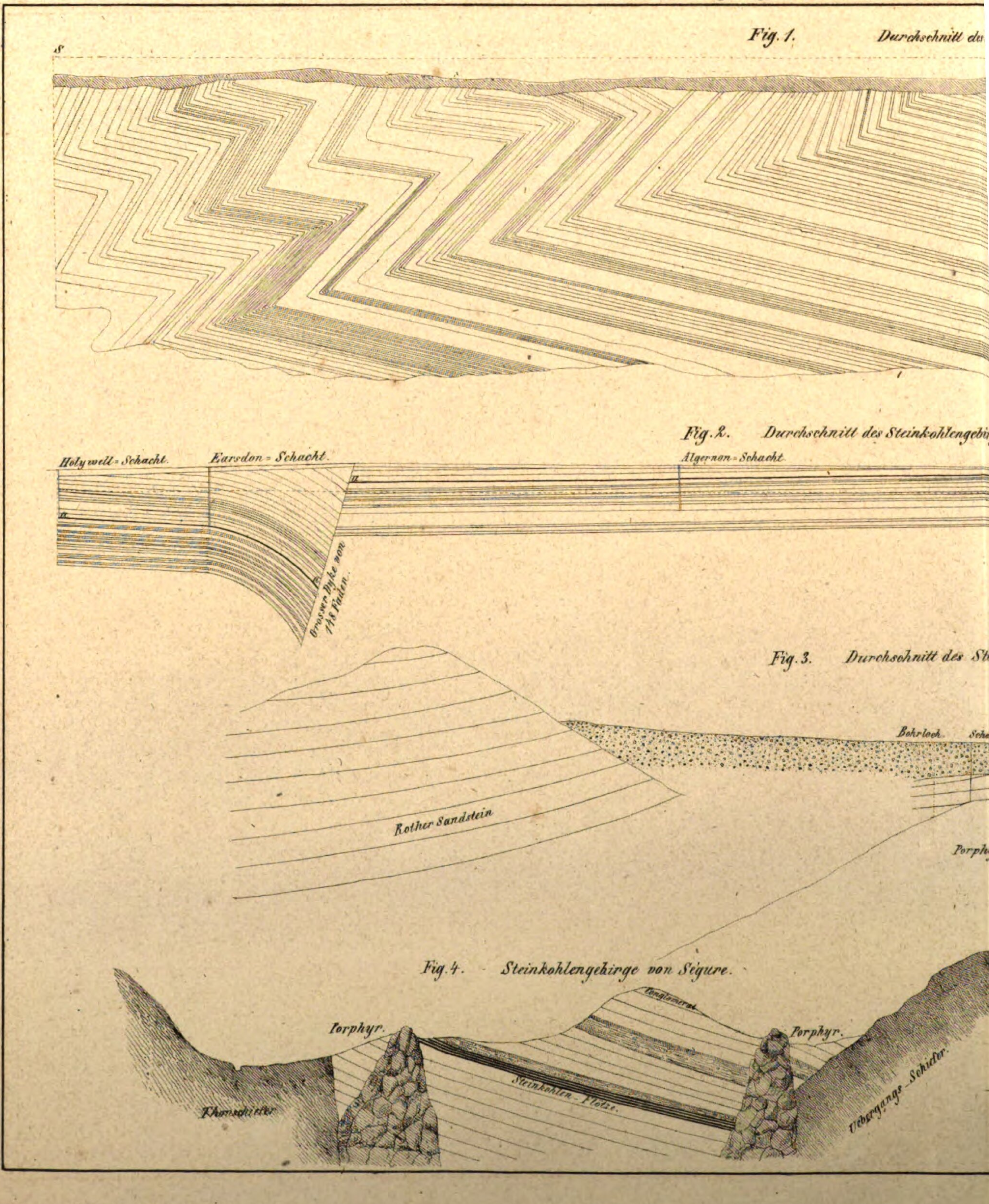
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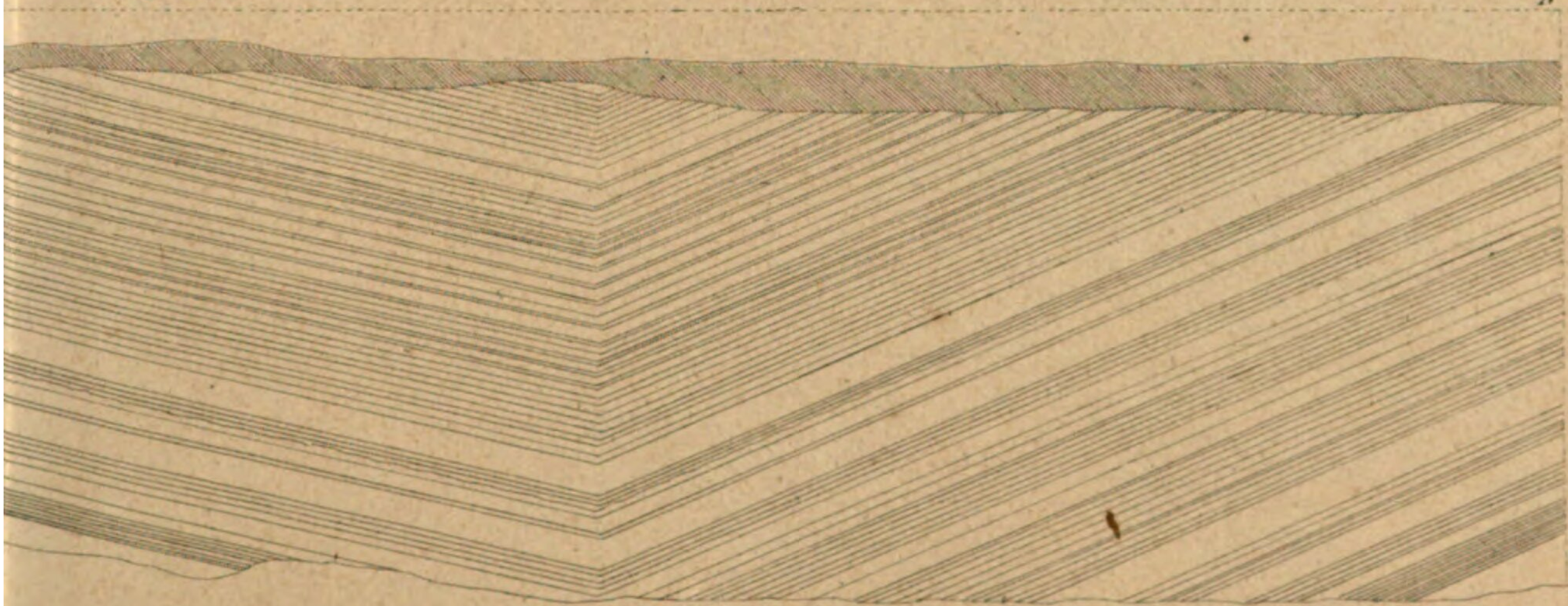
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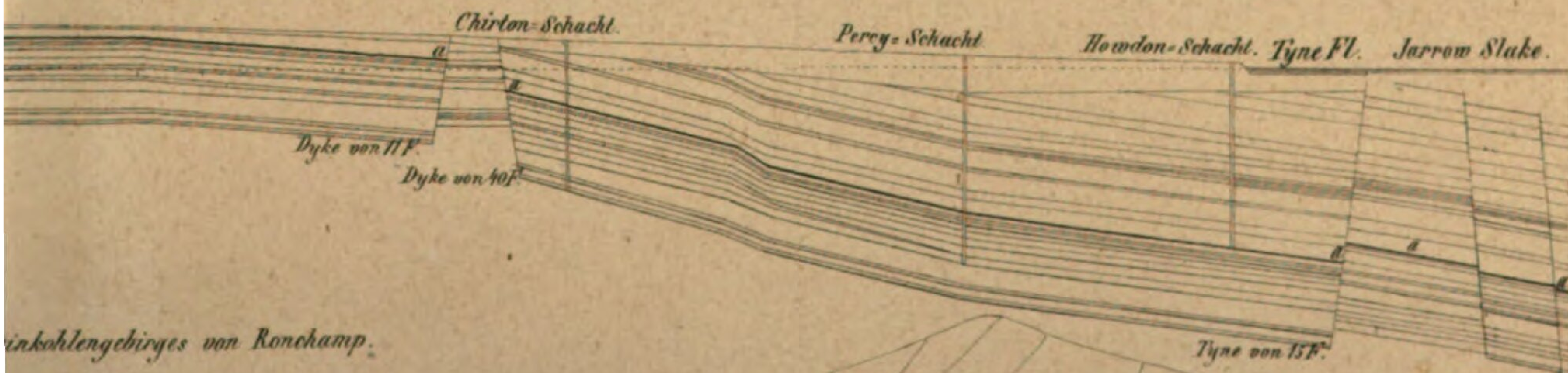
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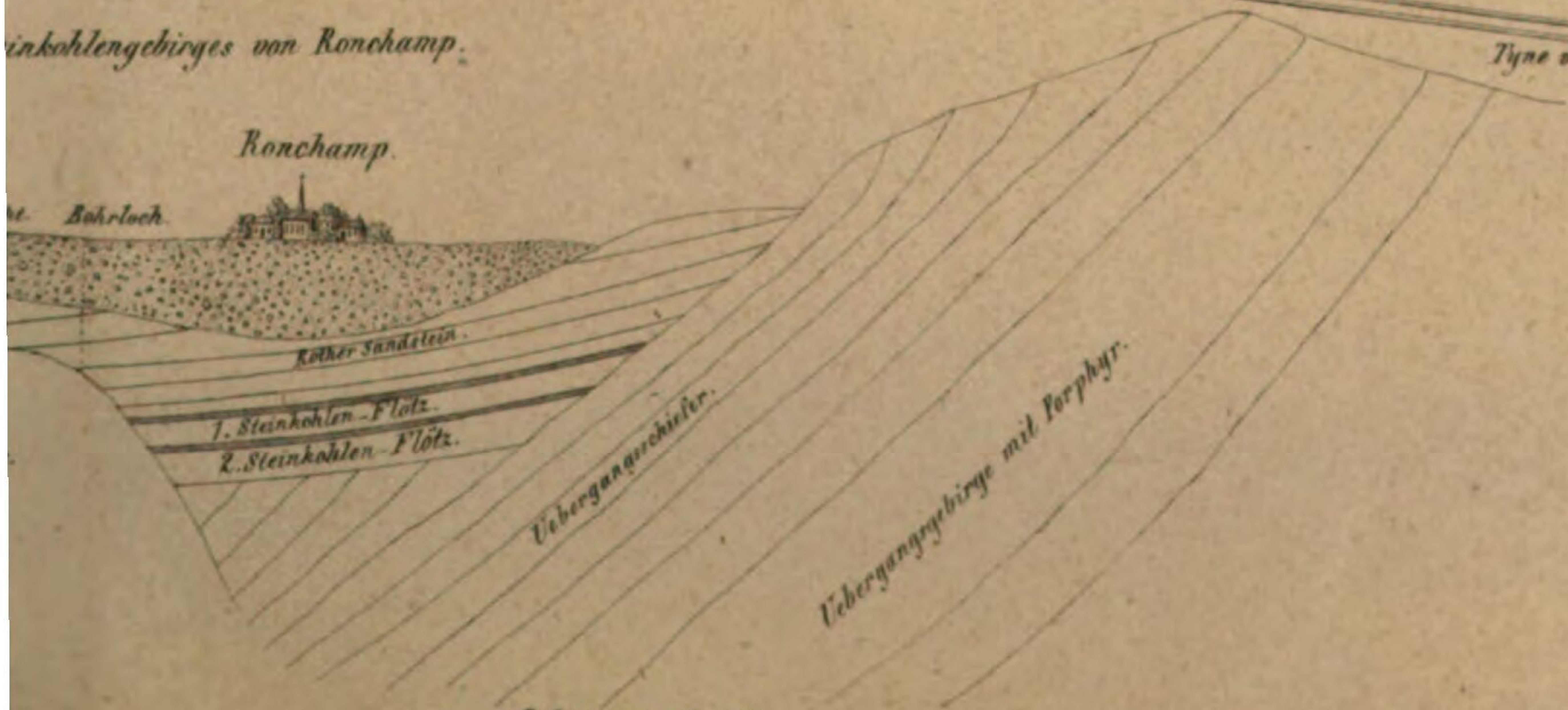
..des Steinkohlengebirges bei Mons.



..irges der Umgegend von Newcastel am Tyne.



..inkohlengebirges von Ronchamp.



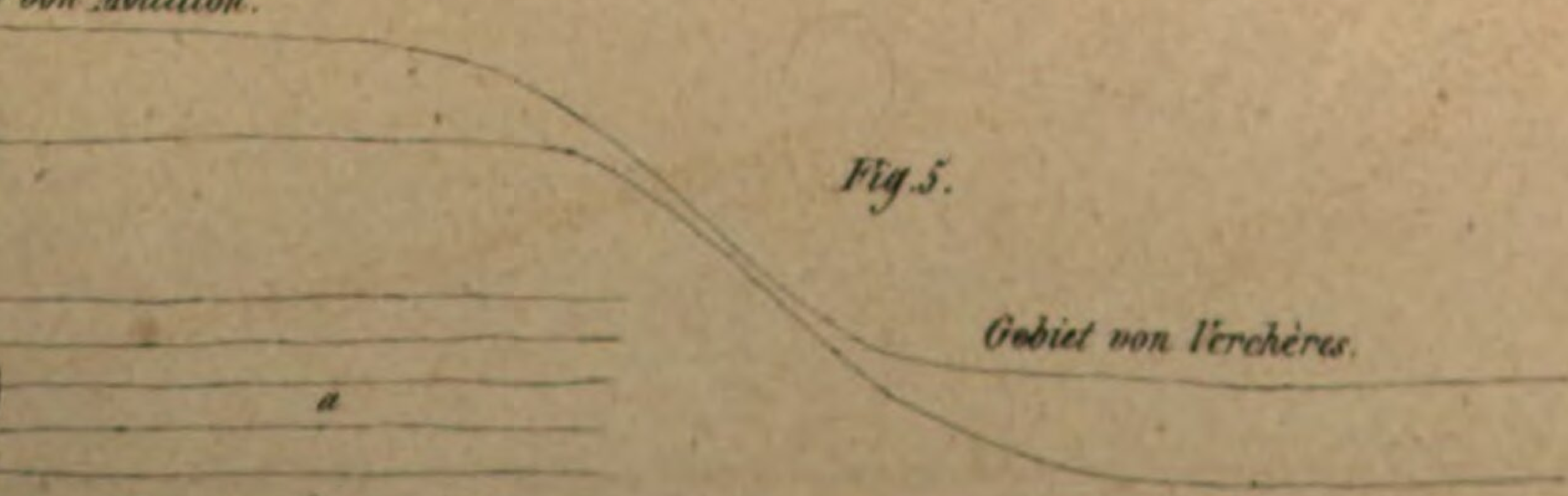


Fig. 5.

Fig. 6.



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Taf. LXIII. Neue Bohrwerkzeuge von Kind.

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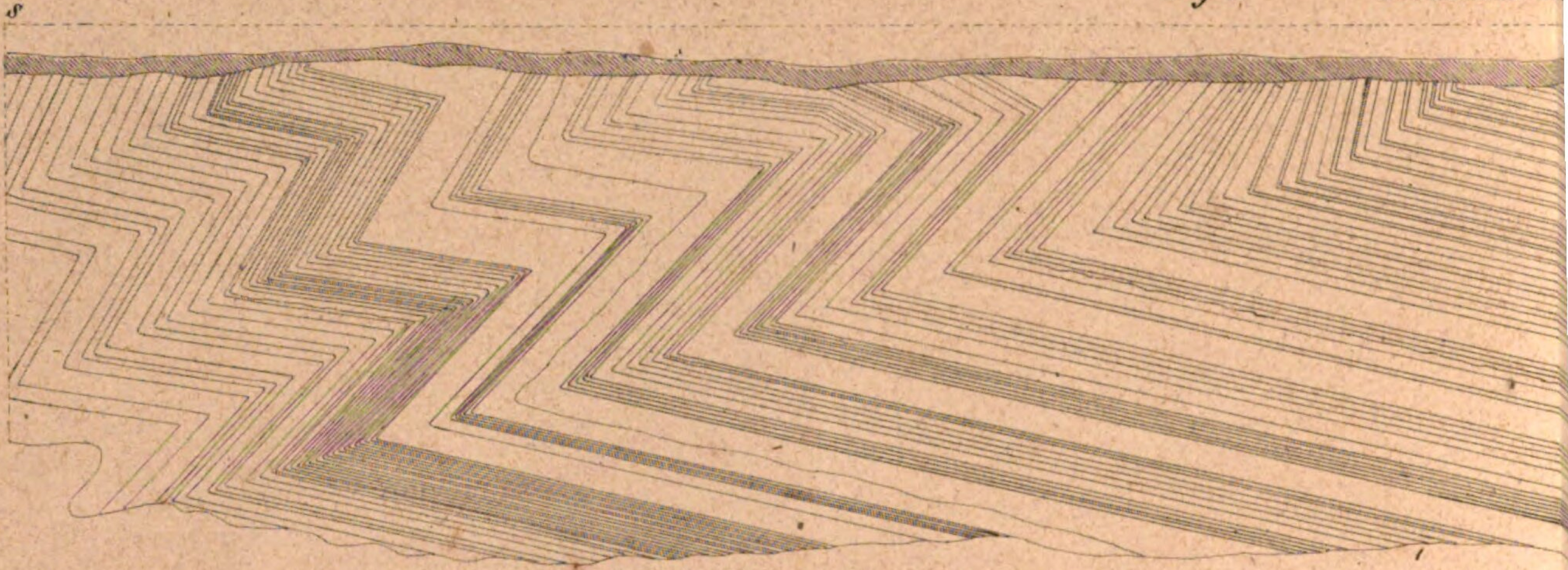


Fig. 2. Durchschnitt des Steinkohlengeb



Fig. 3. Durchschnitt des St

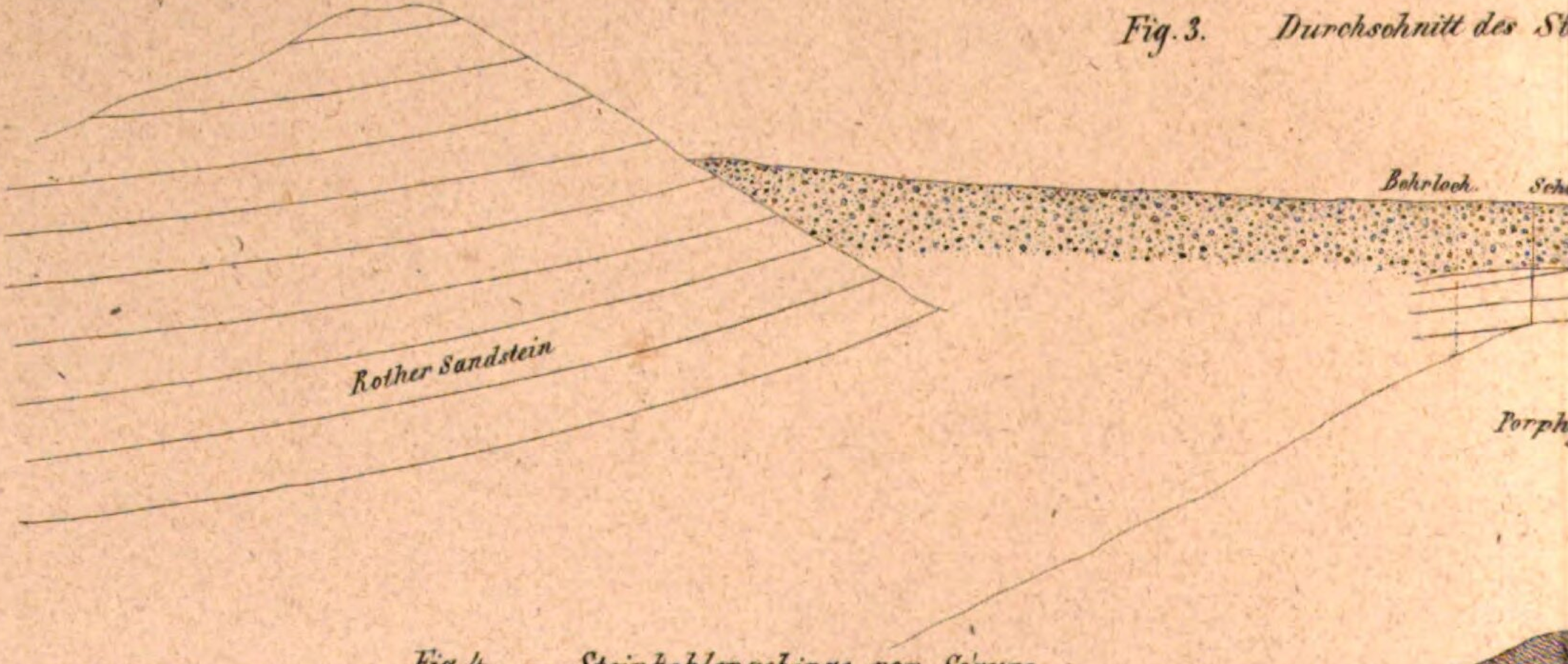
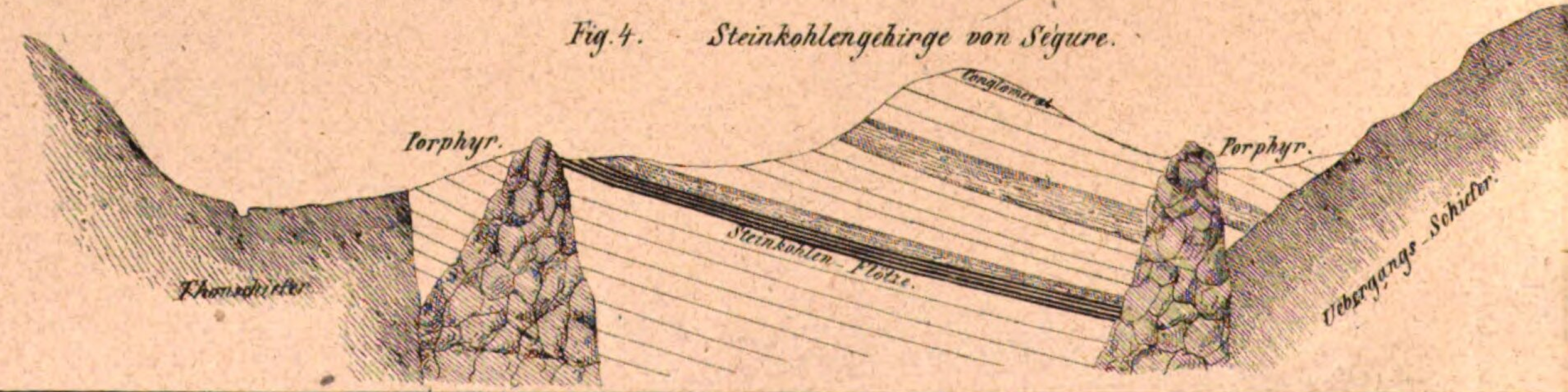


Fig. 4. Steinkohlengebirge von Segure.



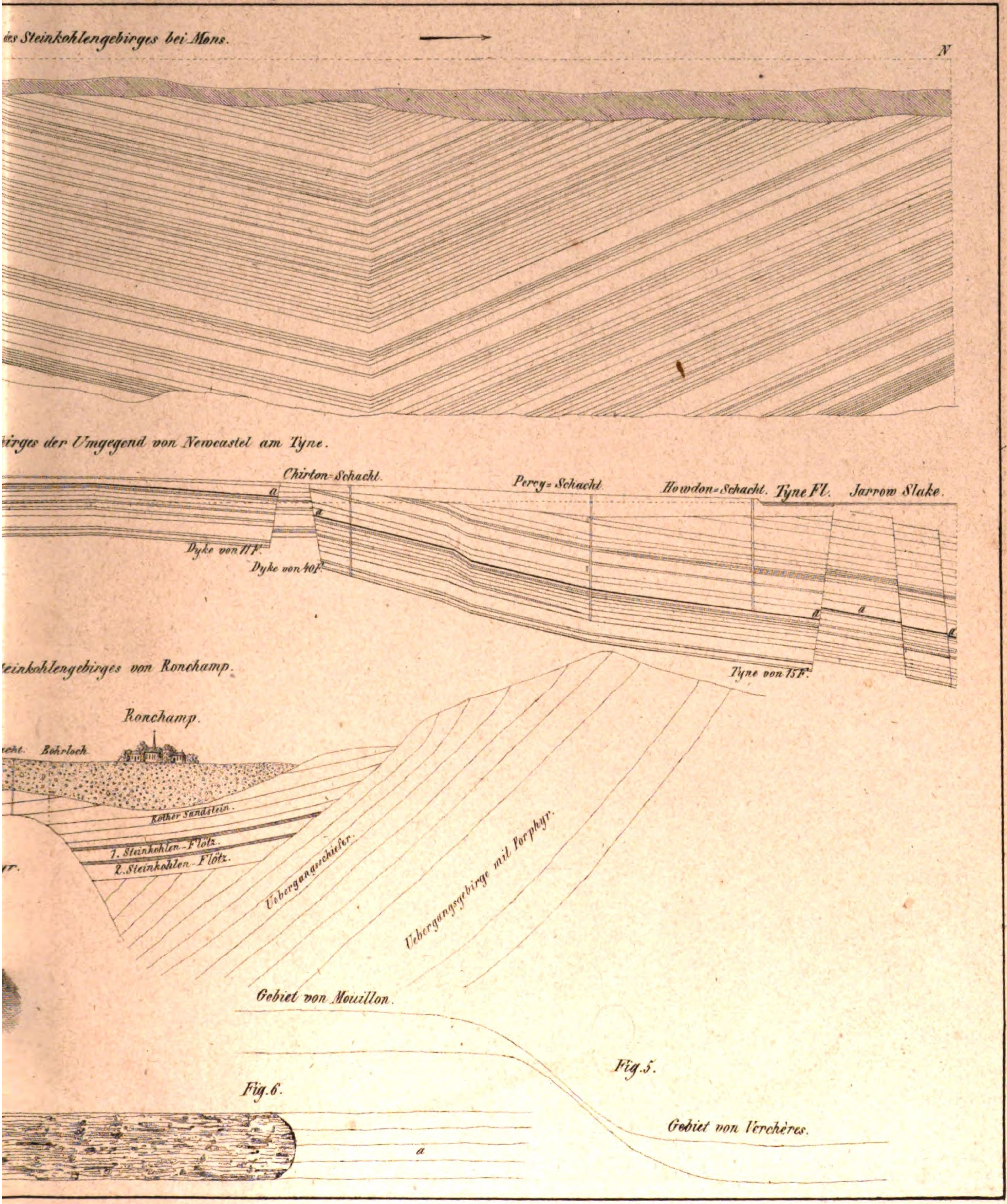

des Steinkohlengebirges bei Mons.
N
birges der Umgegend von Newcastel am Tyne.
Chirton=Schacht.
Percy=Schacht.
Howdon=Schacht.
Tyne Fl.
Jarrow Slake.
a
Dyke von 11 F.
Dyke von 40 F.
Tyne von 15 F.
teinkohlengebirges von Ronchamp.
Ronchamp.
Bohrloch.
Rother Sandstein.
1. Steinkohlen-Flötz.
2. Steinkohlen-Flötz.
Uebergangsschiefer.
Uebergangsgebirge mit Porphyr.
Gebiet von Mouillon.
Fig. 5.
Fig. 6.
Gebiet von Verchères.

Fig. 1.

Senkrechter Durchschnitt.



Fig. 2.

Horizontaler Durchschnitt.

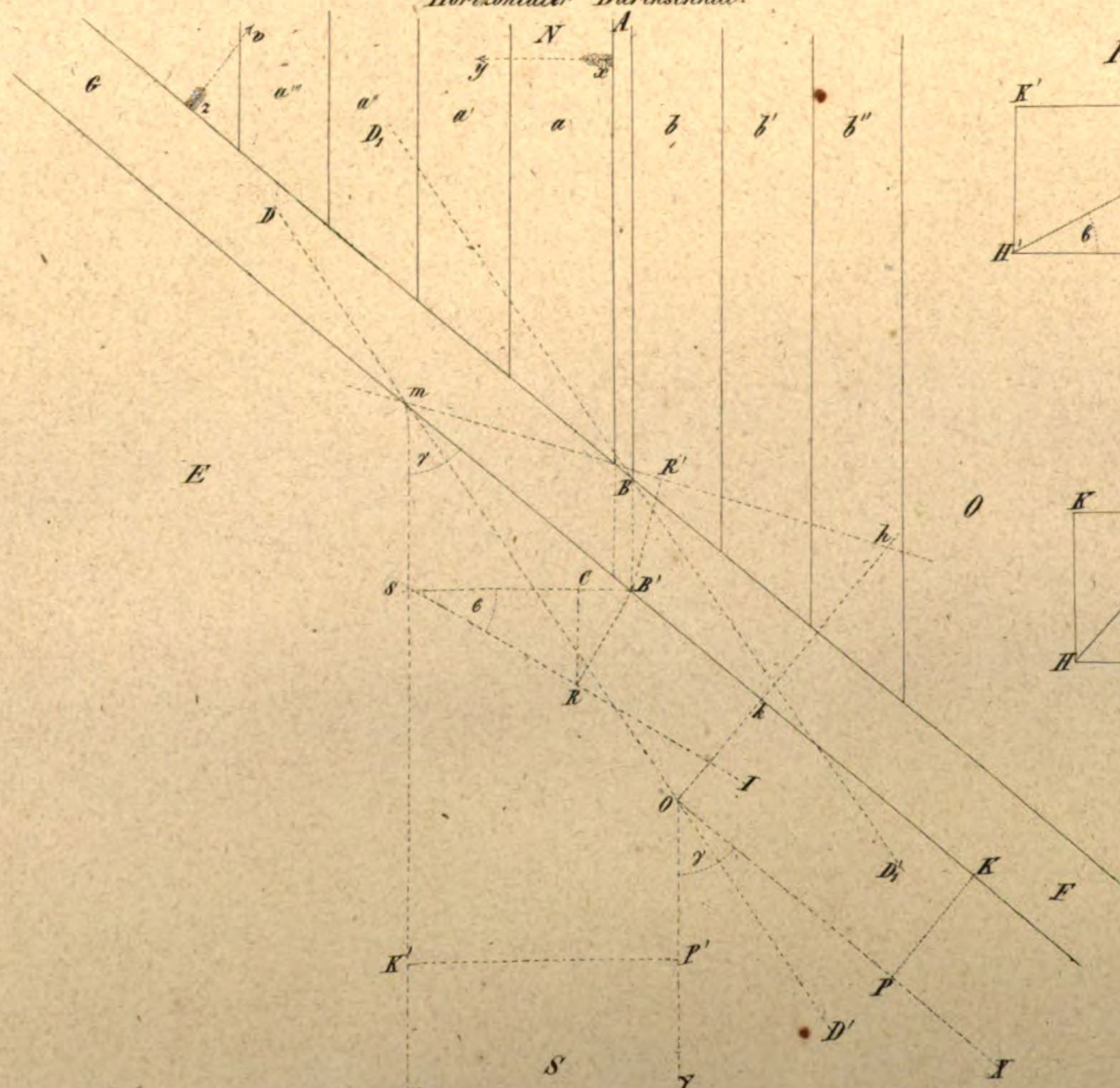


Fig. 4.

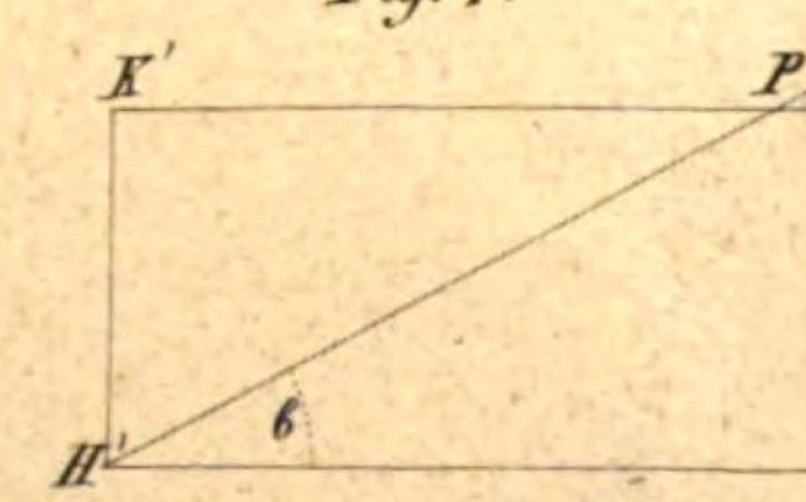
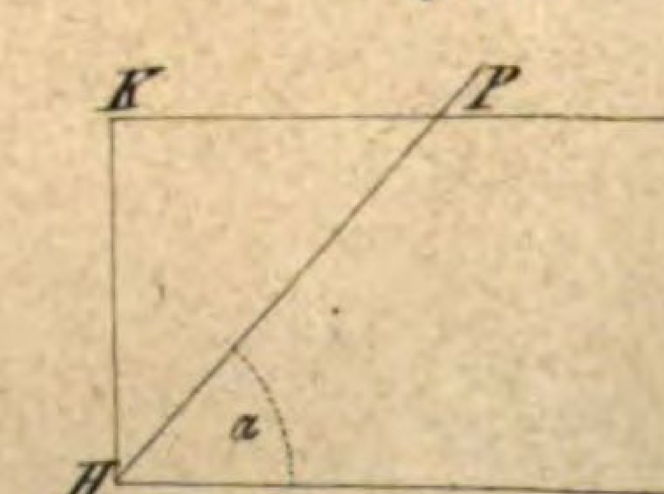


Fig. 3.



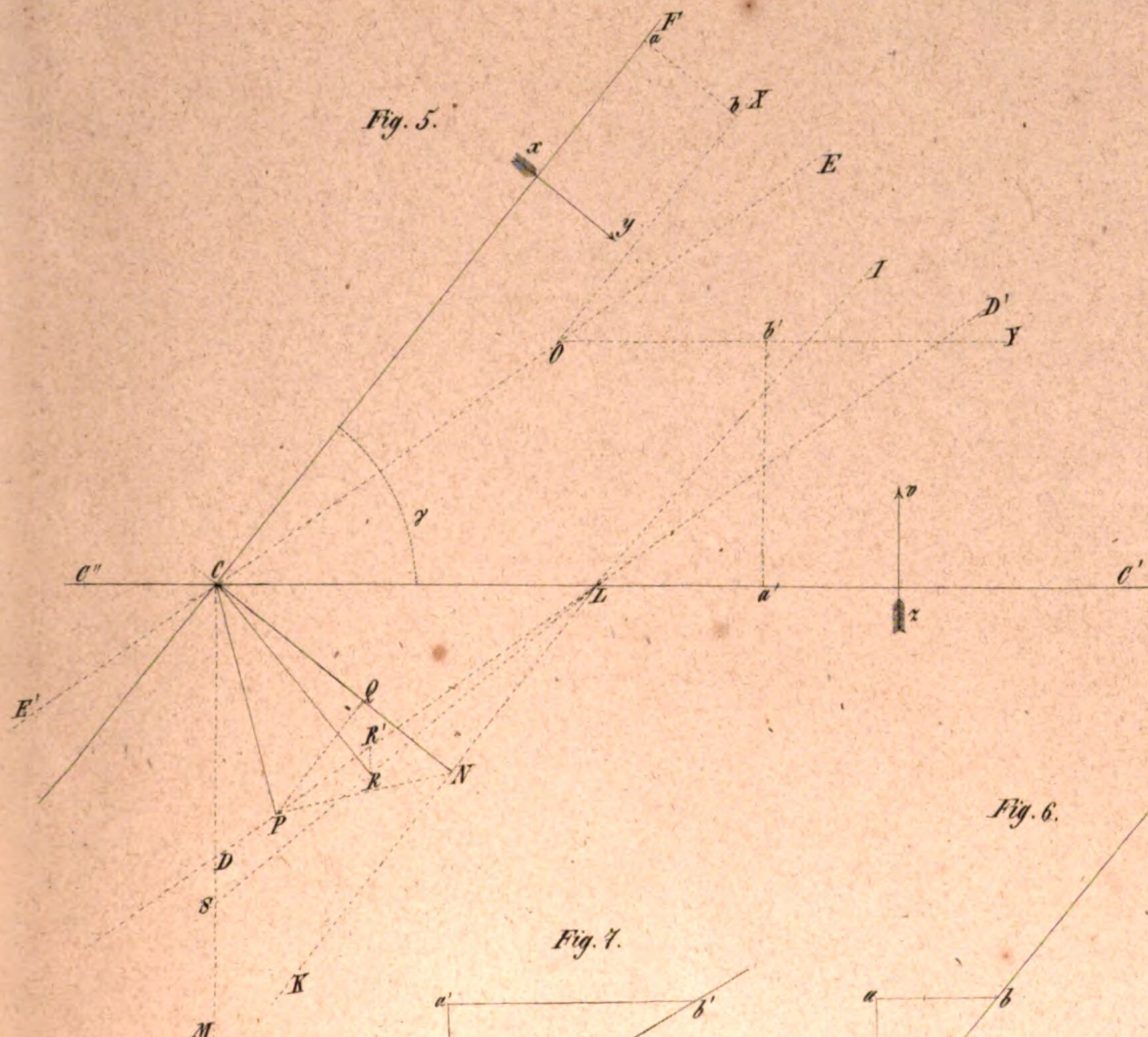


Fig. 5.

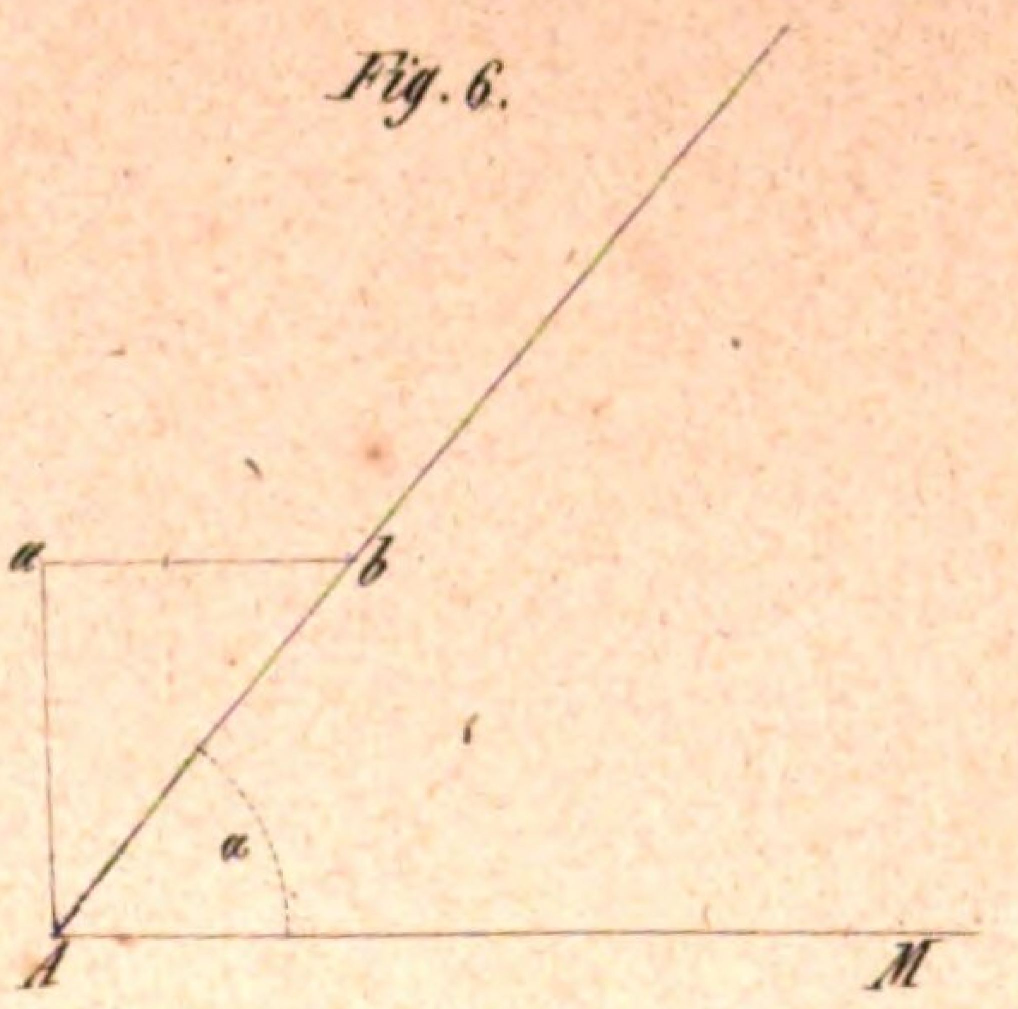


Fig. 6.

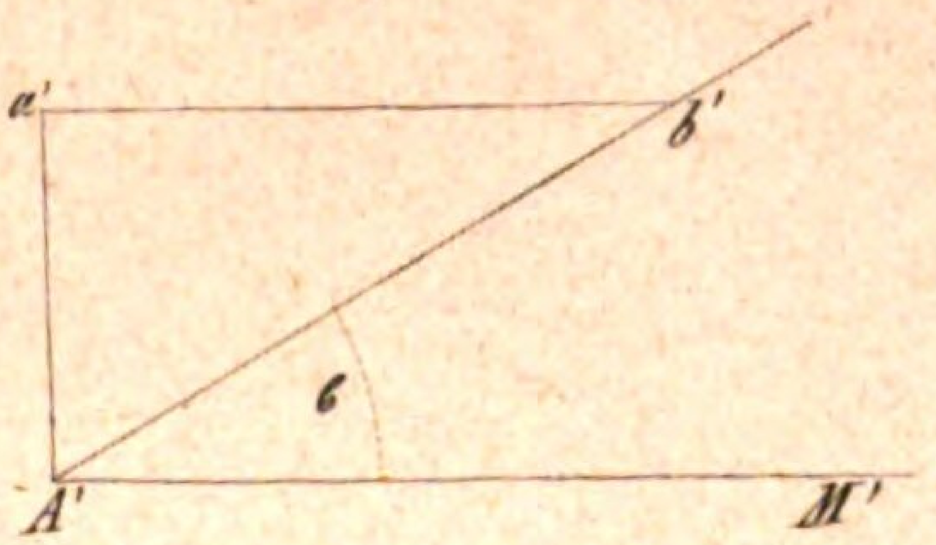


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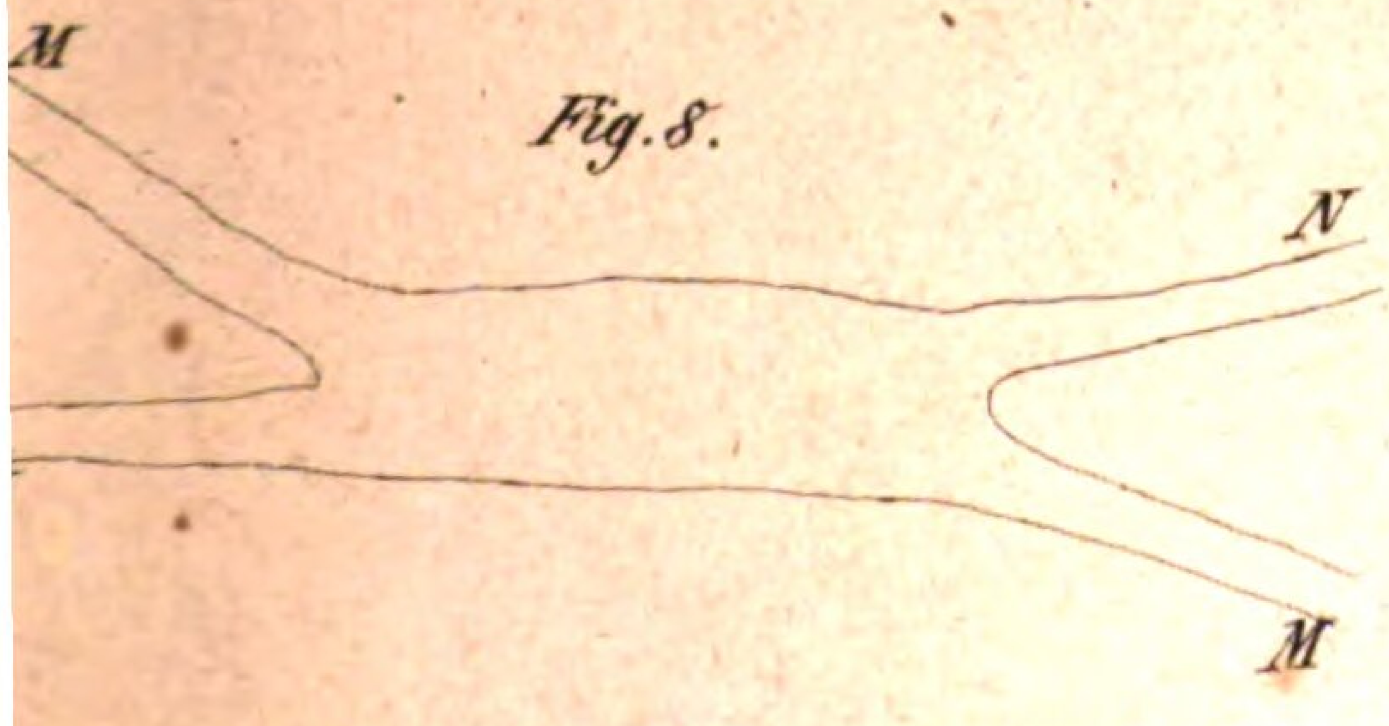


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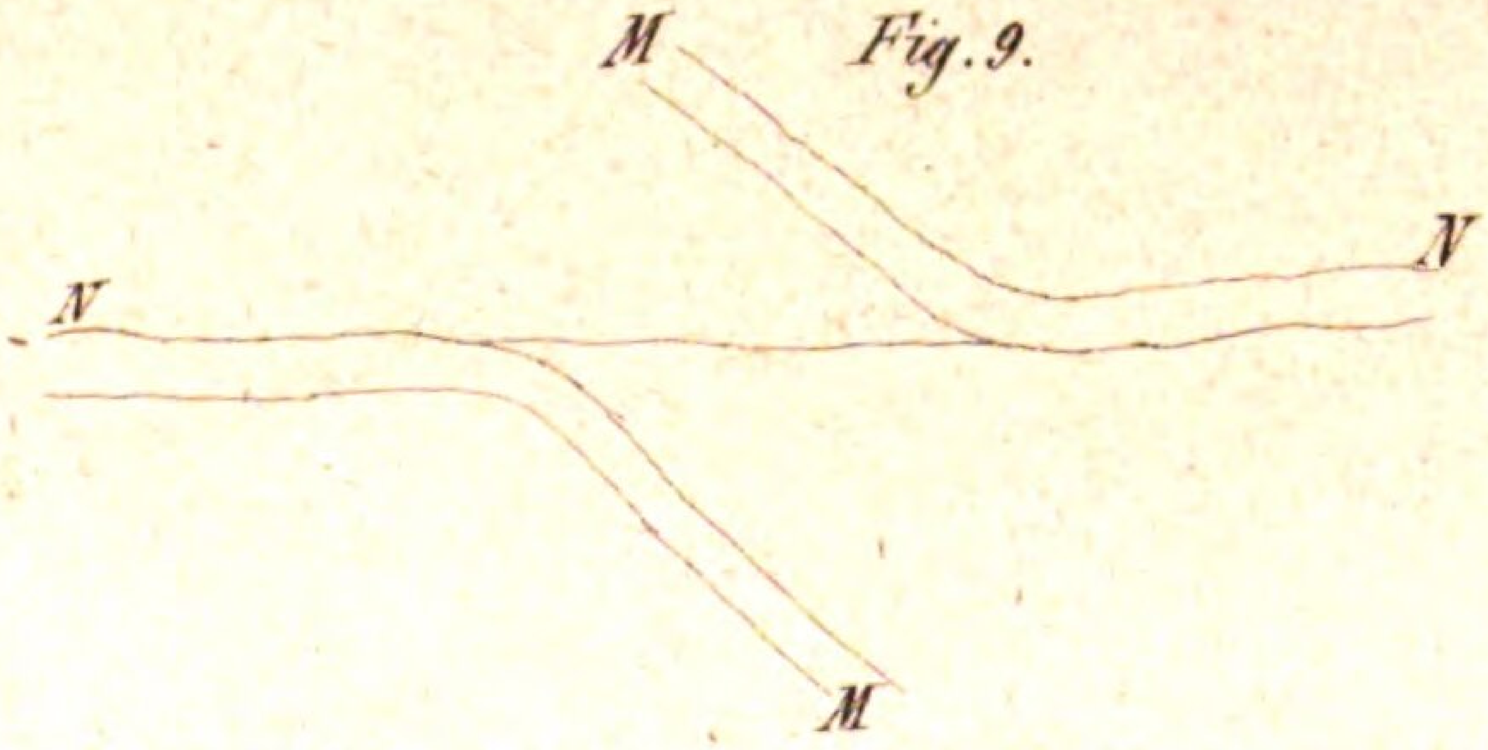
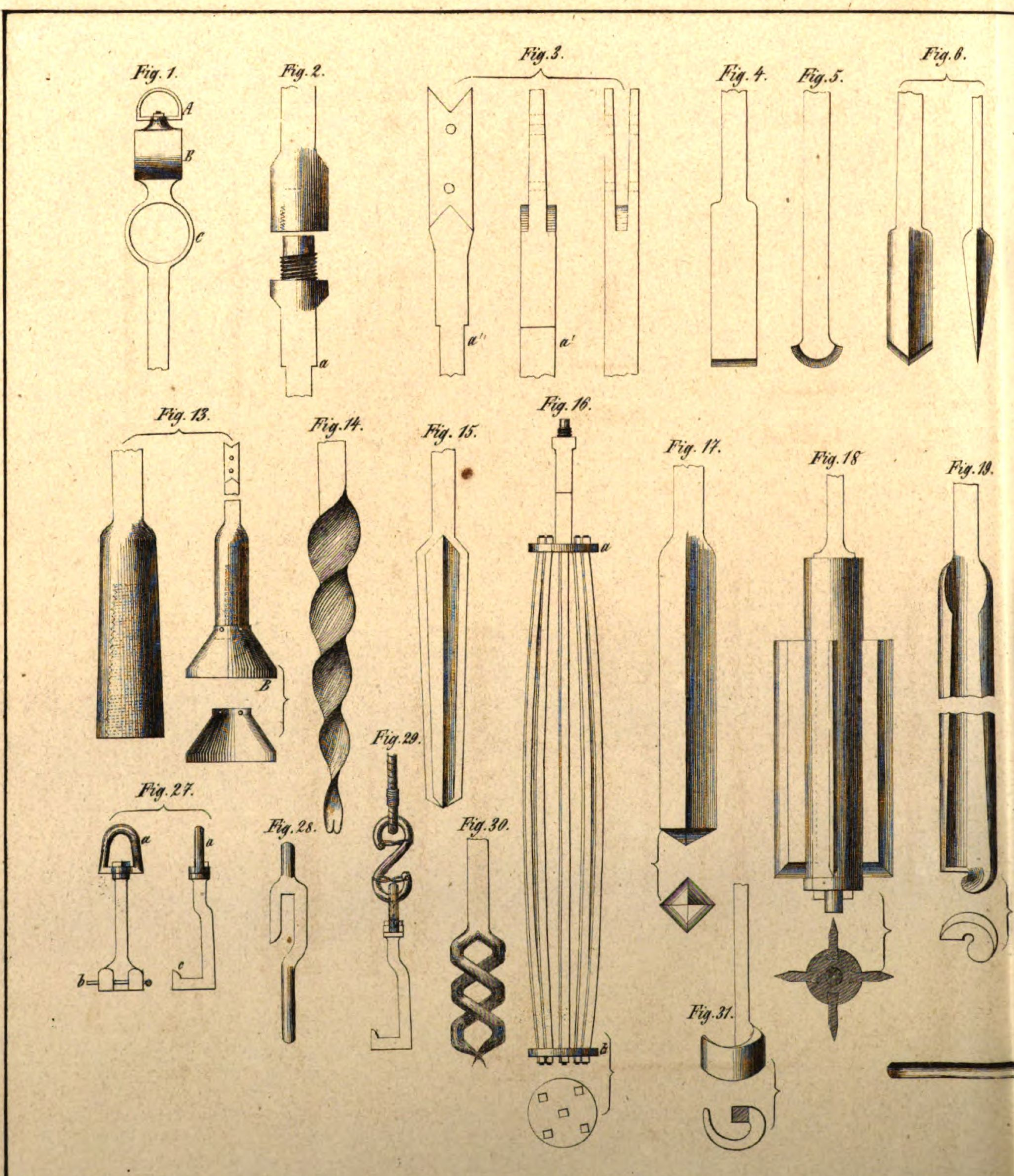
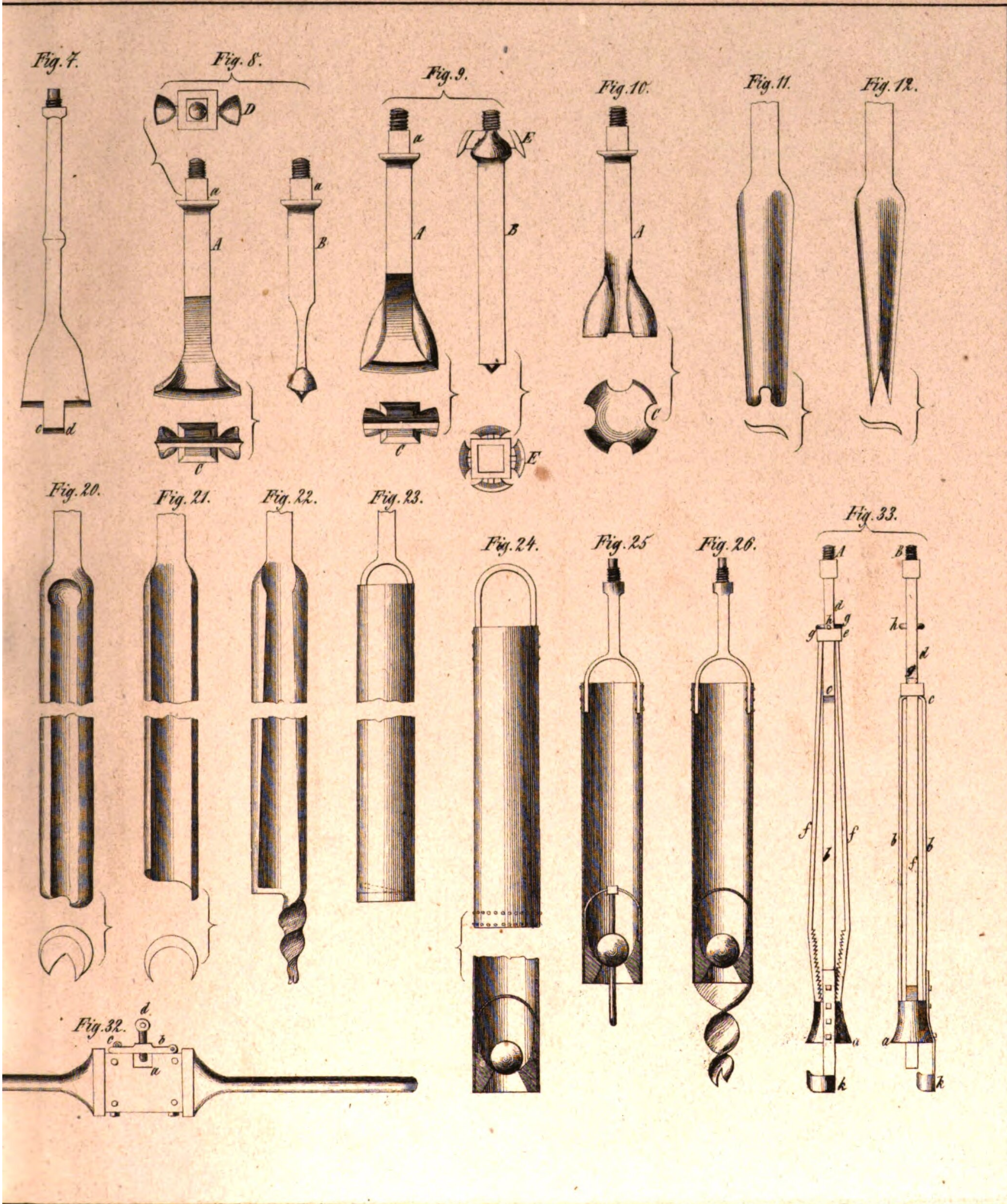
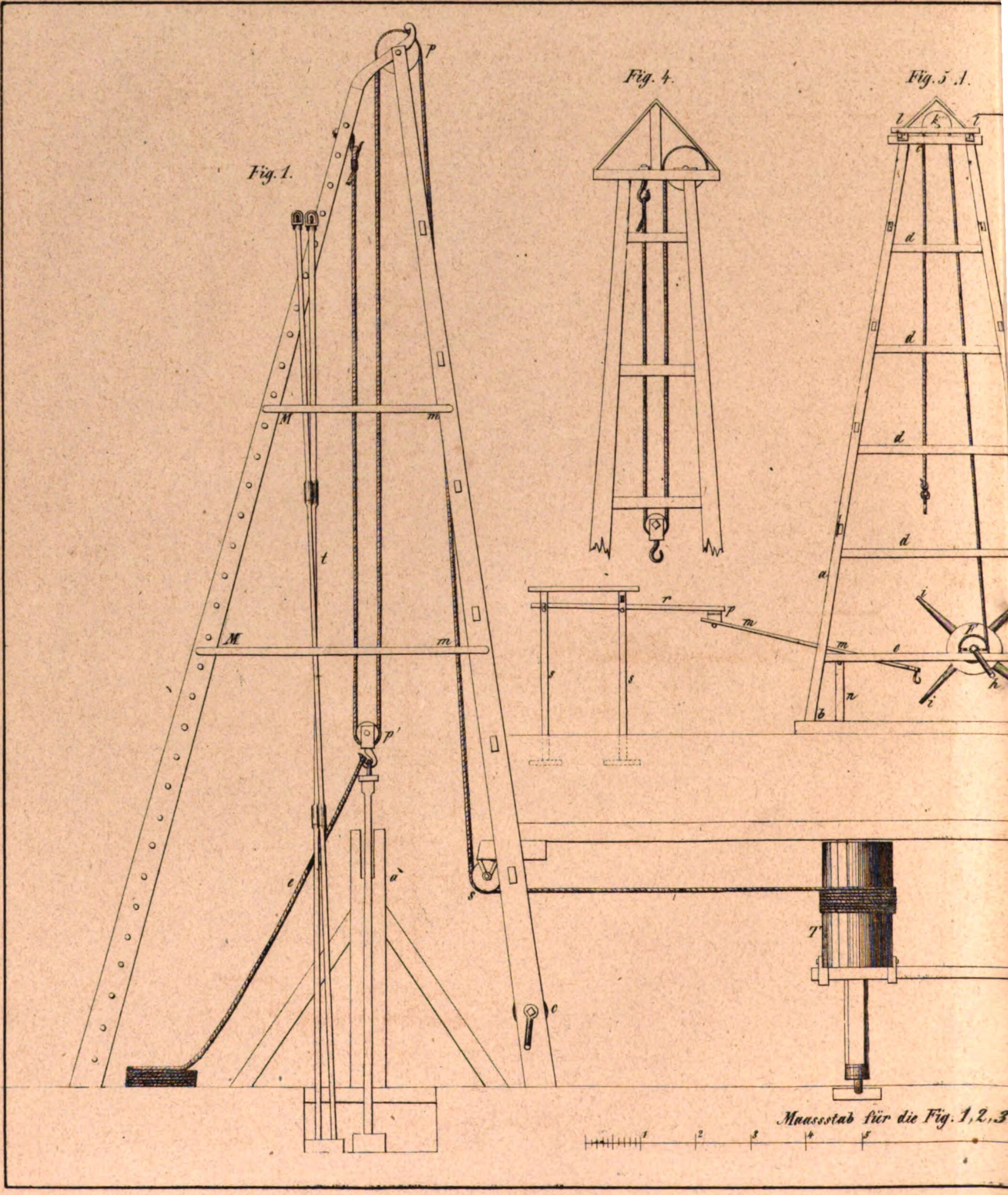
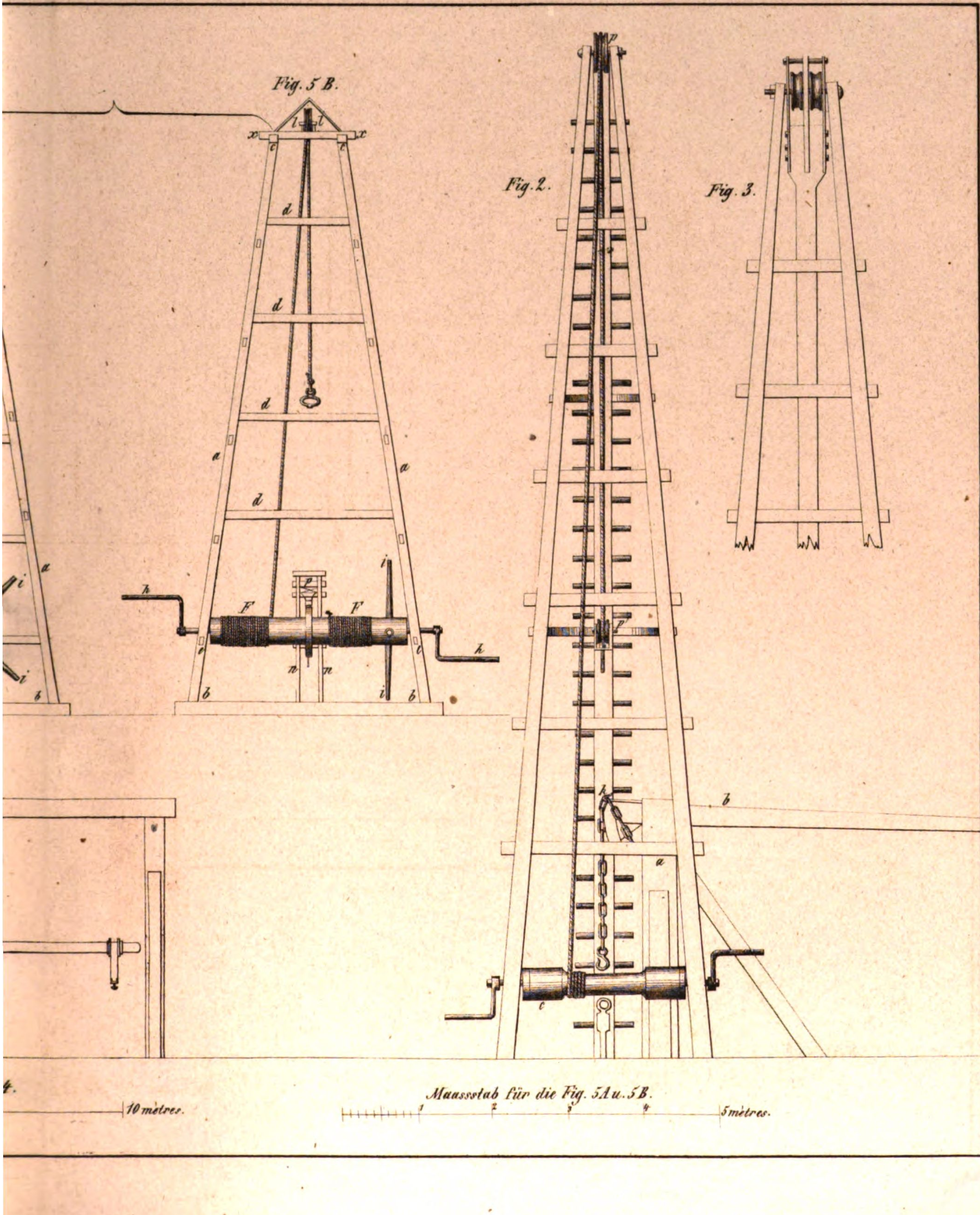


Fig. 9.


Fig. 1.
A
B
C
Fig. 2.
a
Fig. 3.
a''
a'
Fig. 4.
Fig. 5.
Fig. 6.
Fig. 13.
B
Fig. 14.
Fig. 15.
Fig. 16.
a
Fig. 17.
Fig. 18
Fig. 19.
Fig. 27.
a
a
b
c
Fig. 28.
Fig. 29.
Fig. 30.
Fig. 31.


Fig. 7.
c d
Fig. 8.
D
a
A
a
B
C
Fig. 9.
a
A
C
E
B
E
Fig. 10.
A
C
Fig. 11.
Fig. 12.
Fig. 20.
Fig. 21.
Fig. 22.
Fig. 23.
Fig. 24.
Fig. 25
Fig. 26.
Fig. 33.
A
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g
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Fig. 32.
d
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Fig. 1.
Fig. 4.
Fig. 5. A.
Maassstab für die Fig. 1, 2, 3

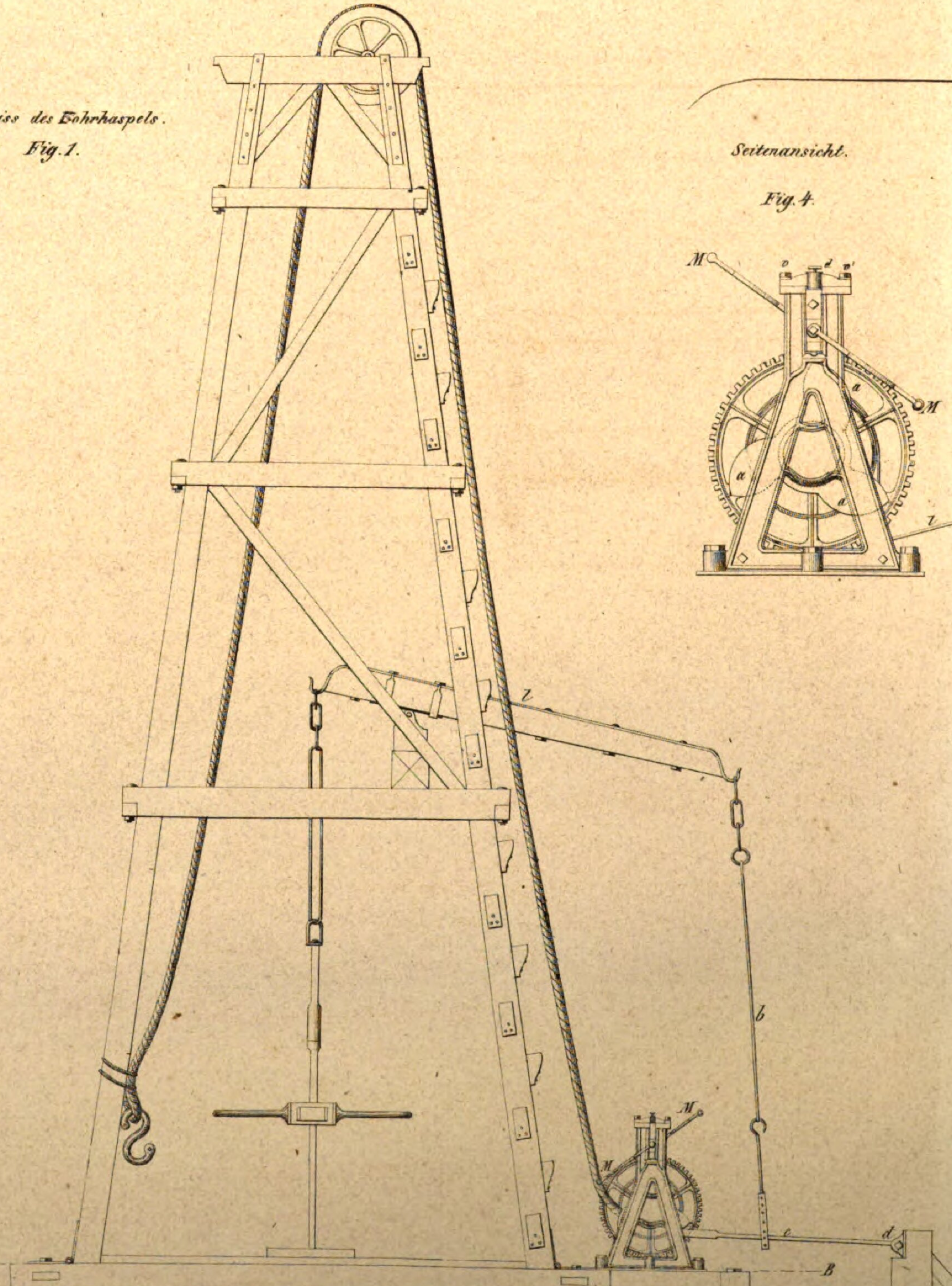

Fig. 5 B.
Fig. 2.
Fig. 3.
Maassstab für die Fig. 5 A u. 5 B.
1 2 3 4 5 mètres.
10 mètres.
4.

Aufriss des Bohrhaspels.

Fig. 1.

Seitenansicht.

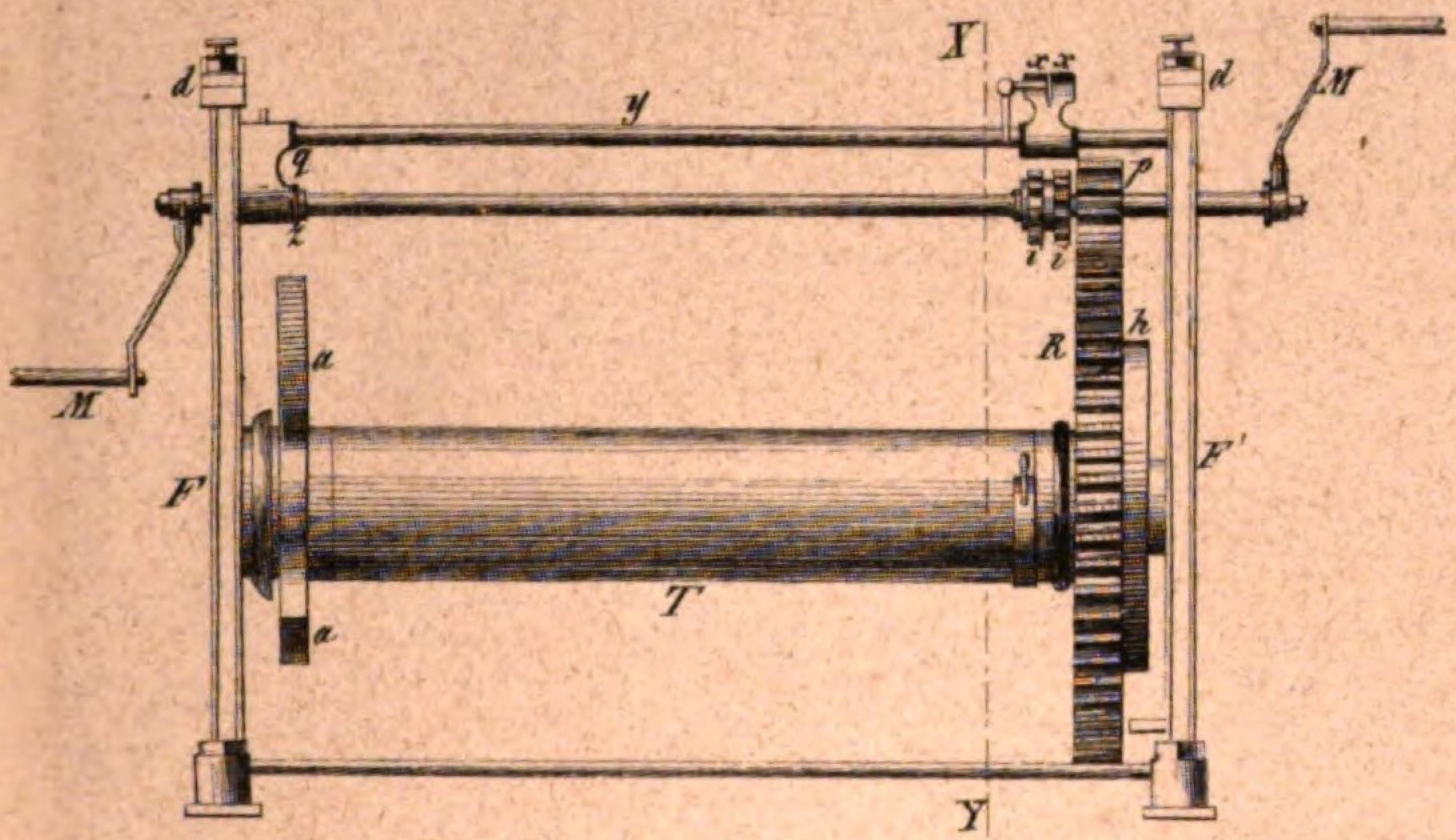
Fig. 4.



Bohrhaspel mit Vorgelege zum Bohren und zum Ausheben des Bohrgestänges.

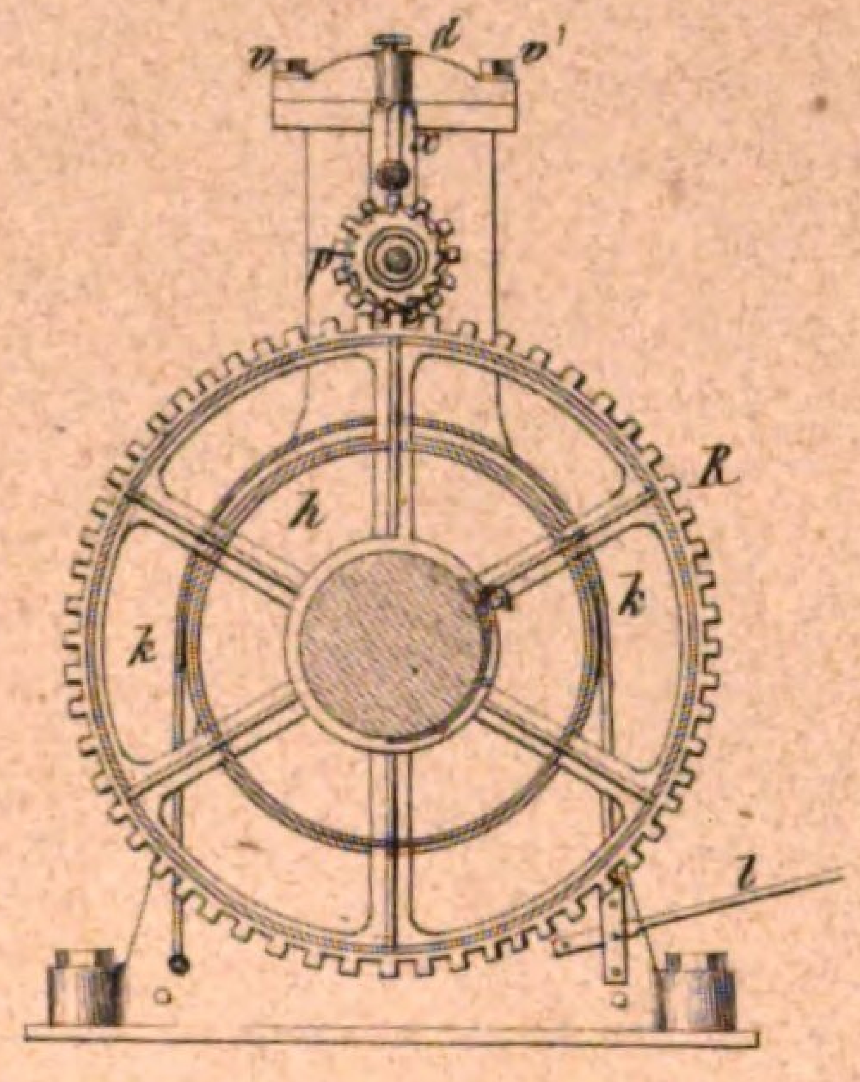
Ansicht von vorn parallel mit dem Haspel.

Fig. 3.



Senkrechter Durchschnitt nach XY, Fig. 3.

Fig. 5.



Maassstab der Fig. 1 u. 2.

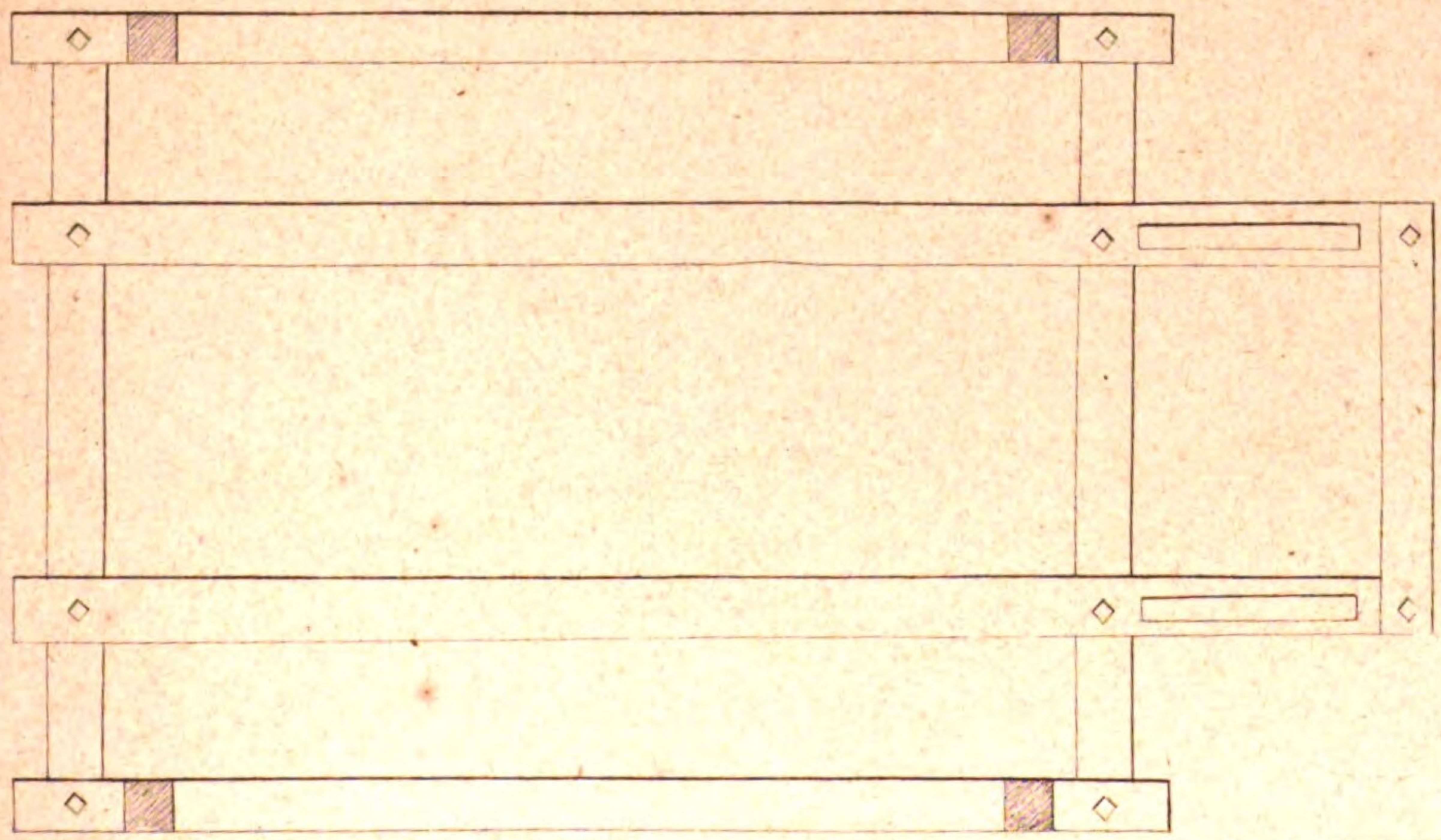


Maassstab der Fig. 3, 4 u 5.

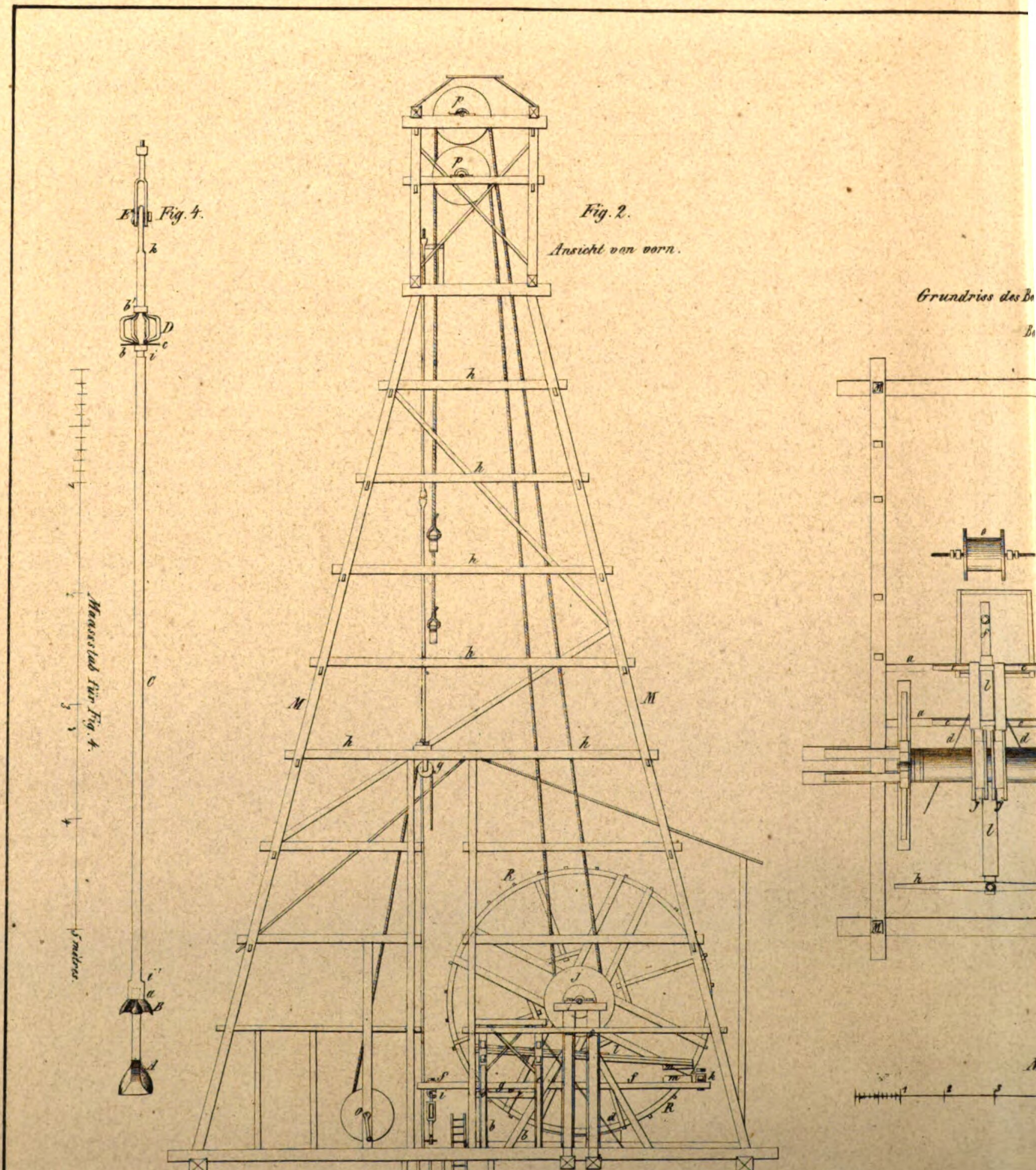


Horizontaler Durchschnitt des Haspels nach AB der Fig. 1.

Fig. 2.

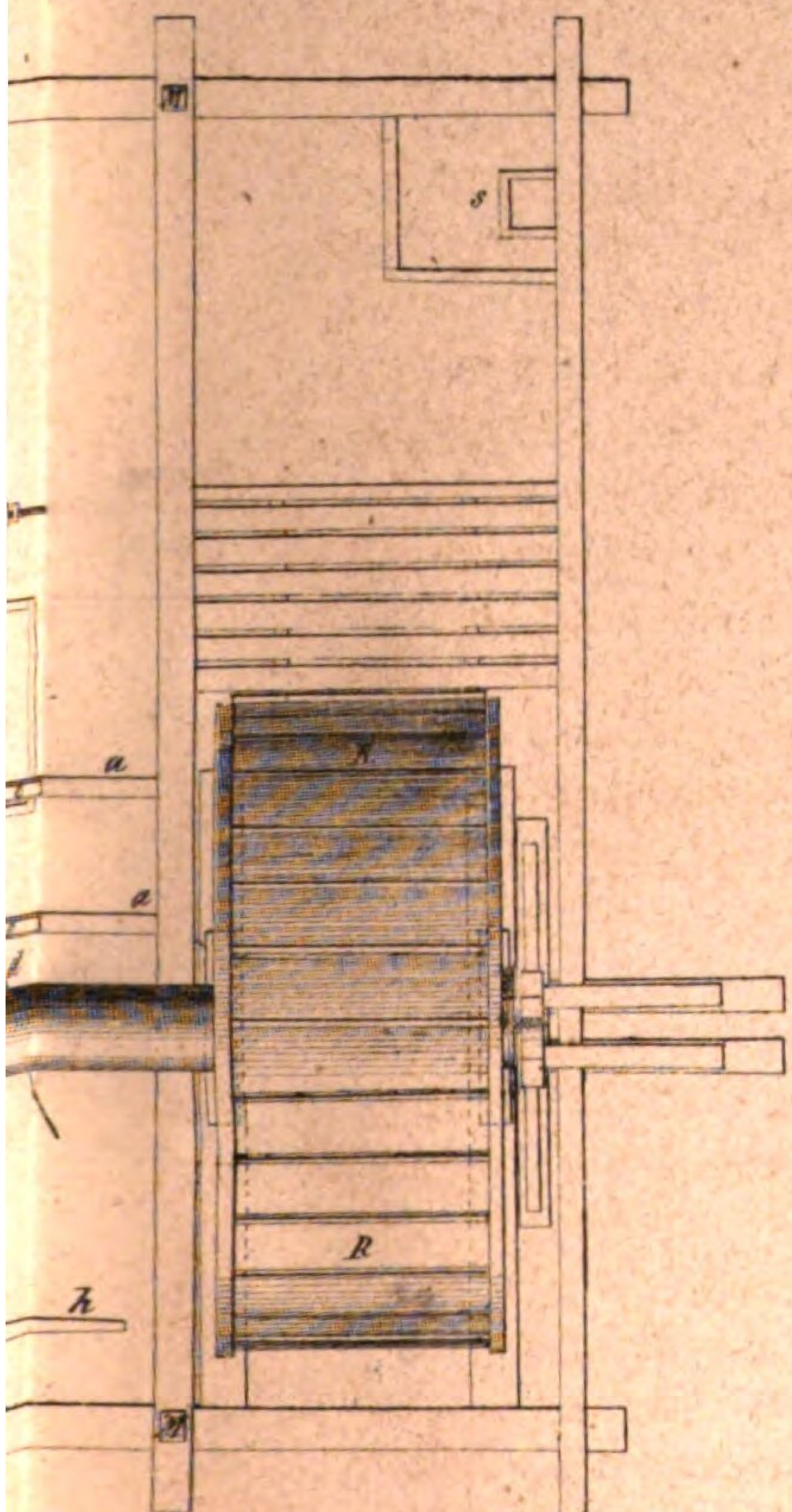


Bohrhaspel, Bohrer und hölz



6

Fig. 1.
...des Bohrhaspels und des Bohrhauses.



...aasstab der Fig. 1, 2 u. 3.

4 5 10 mètres.

Fig. 3.
Seitenansicht.

Fig. 6.

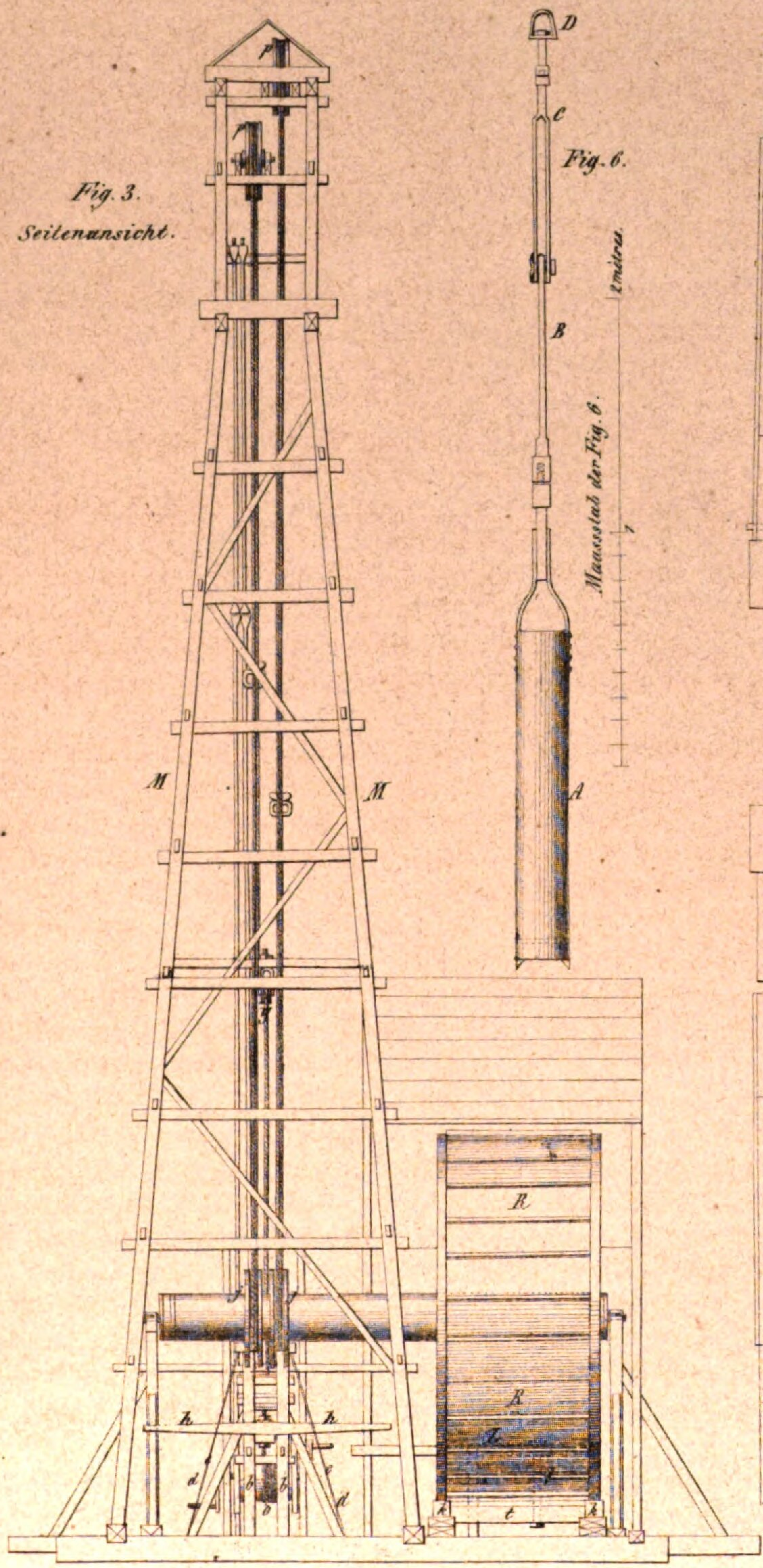


Fig. 5. A.

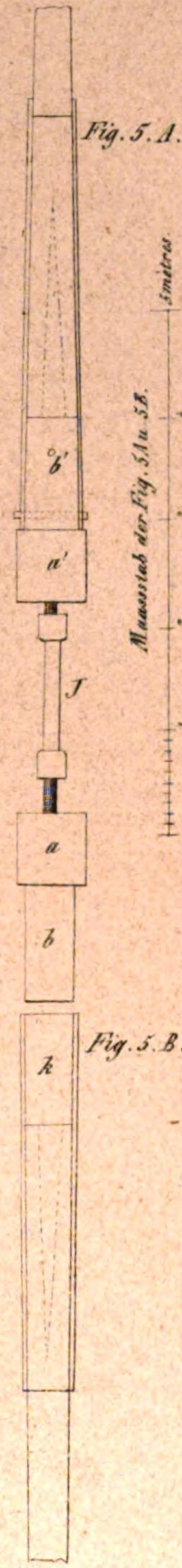
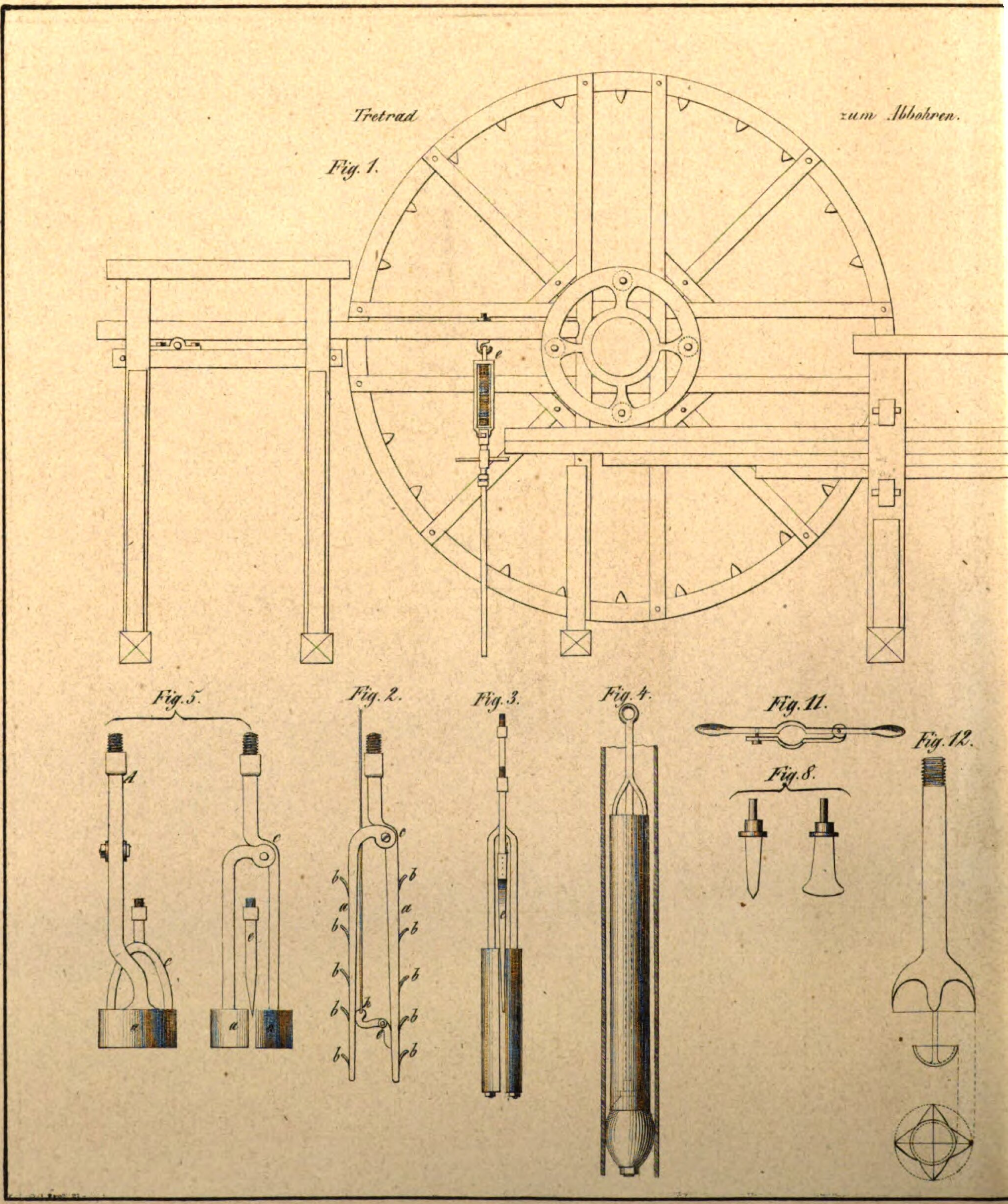
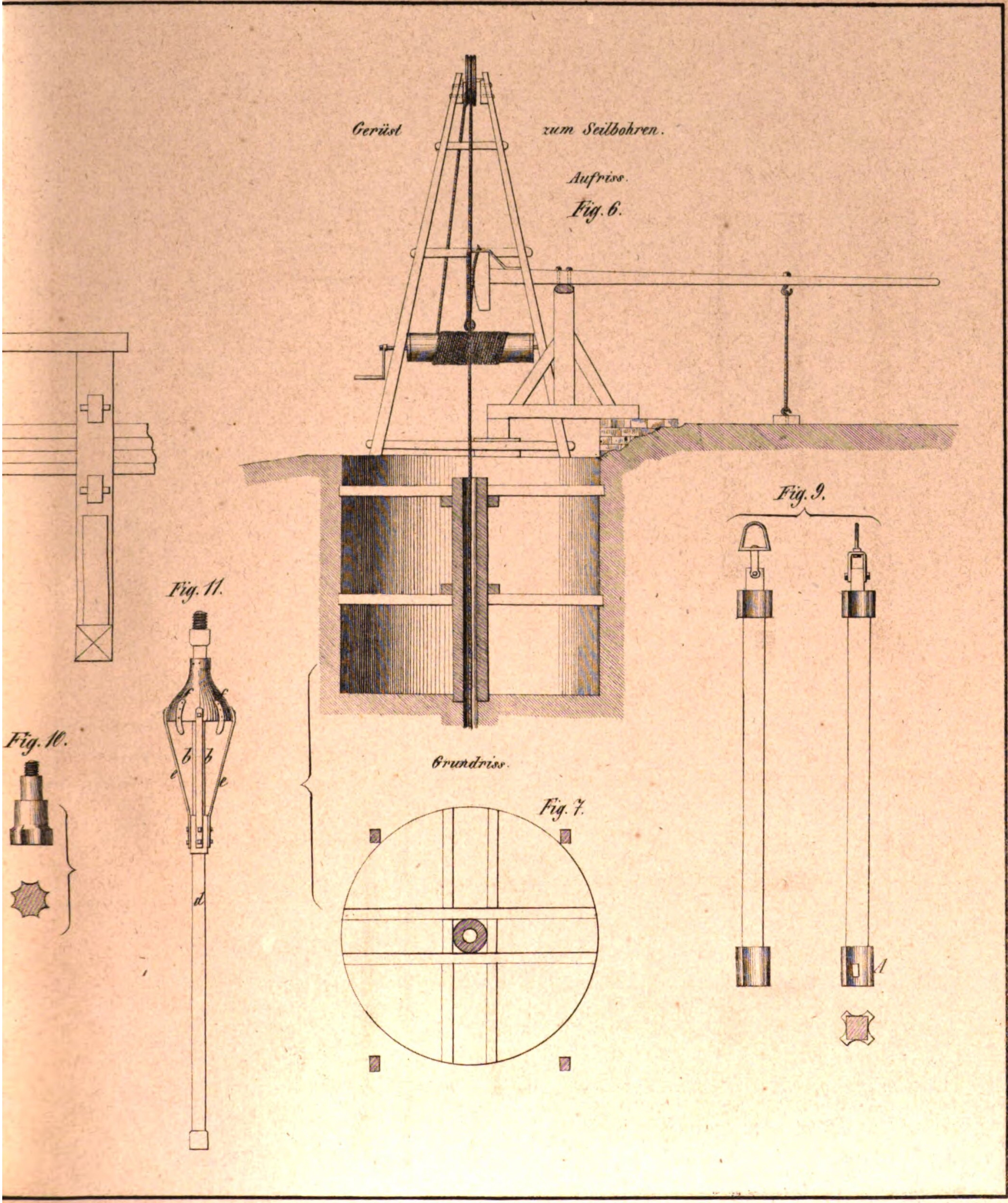
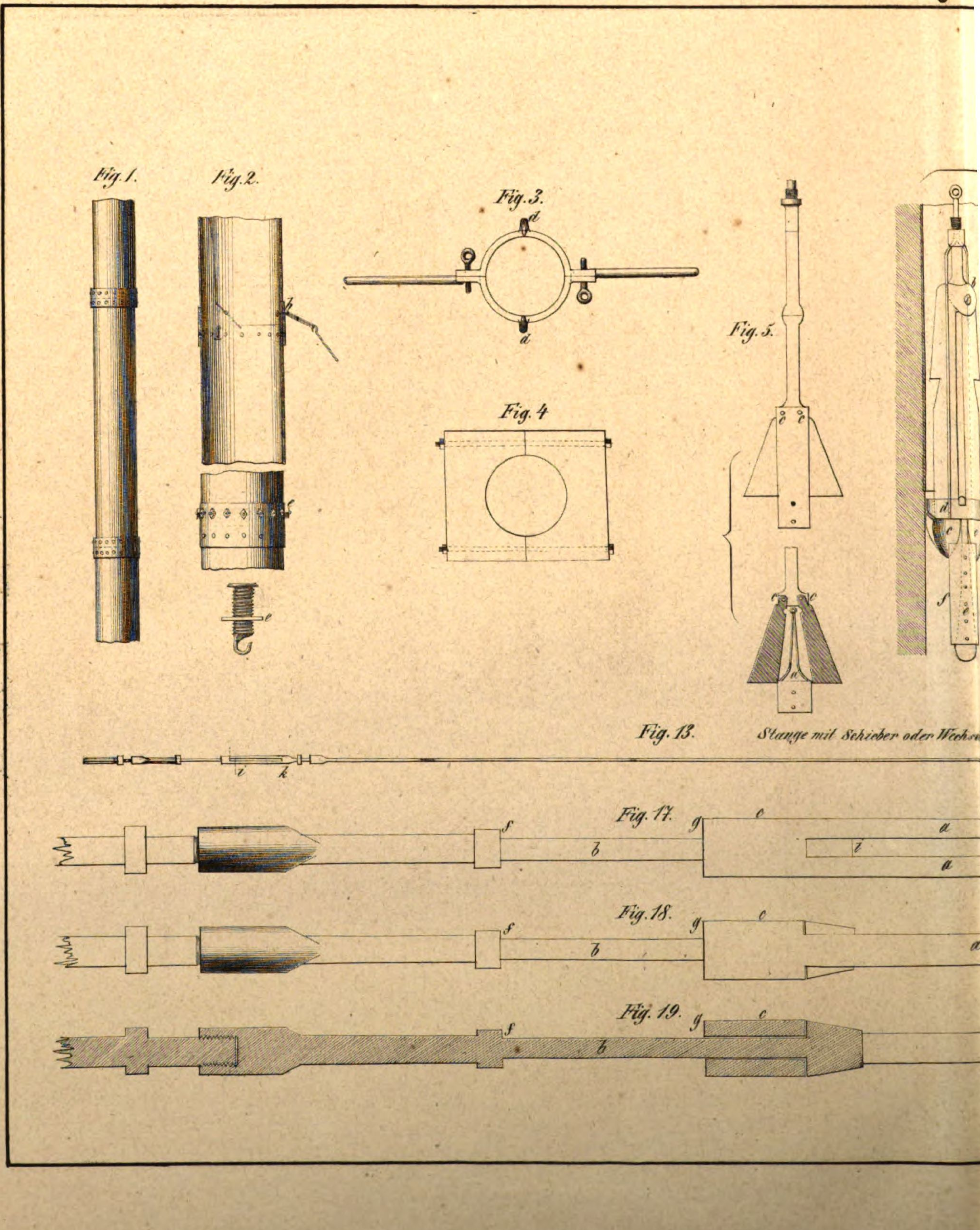
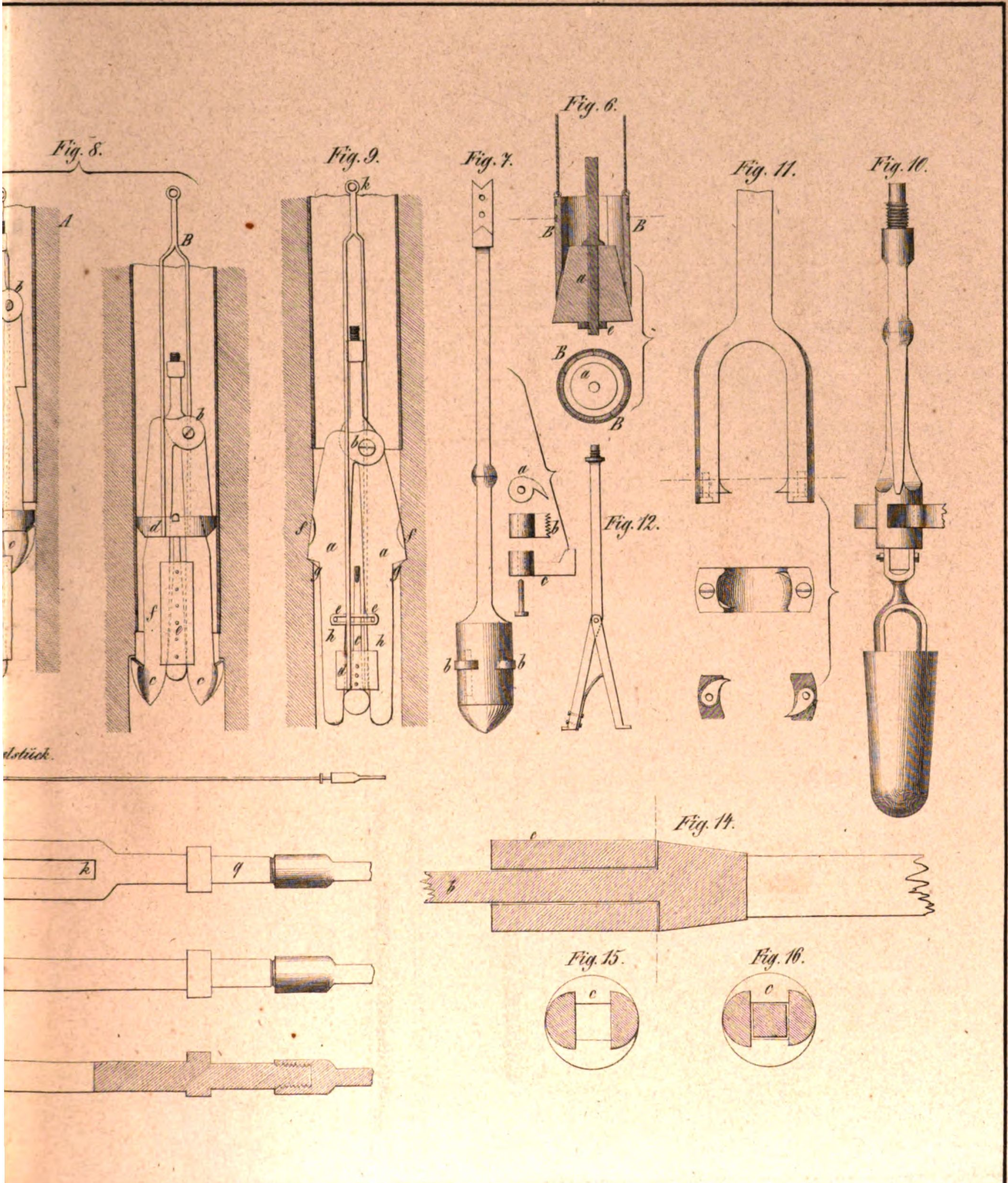


Fig. 5. B.

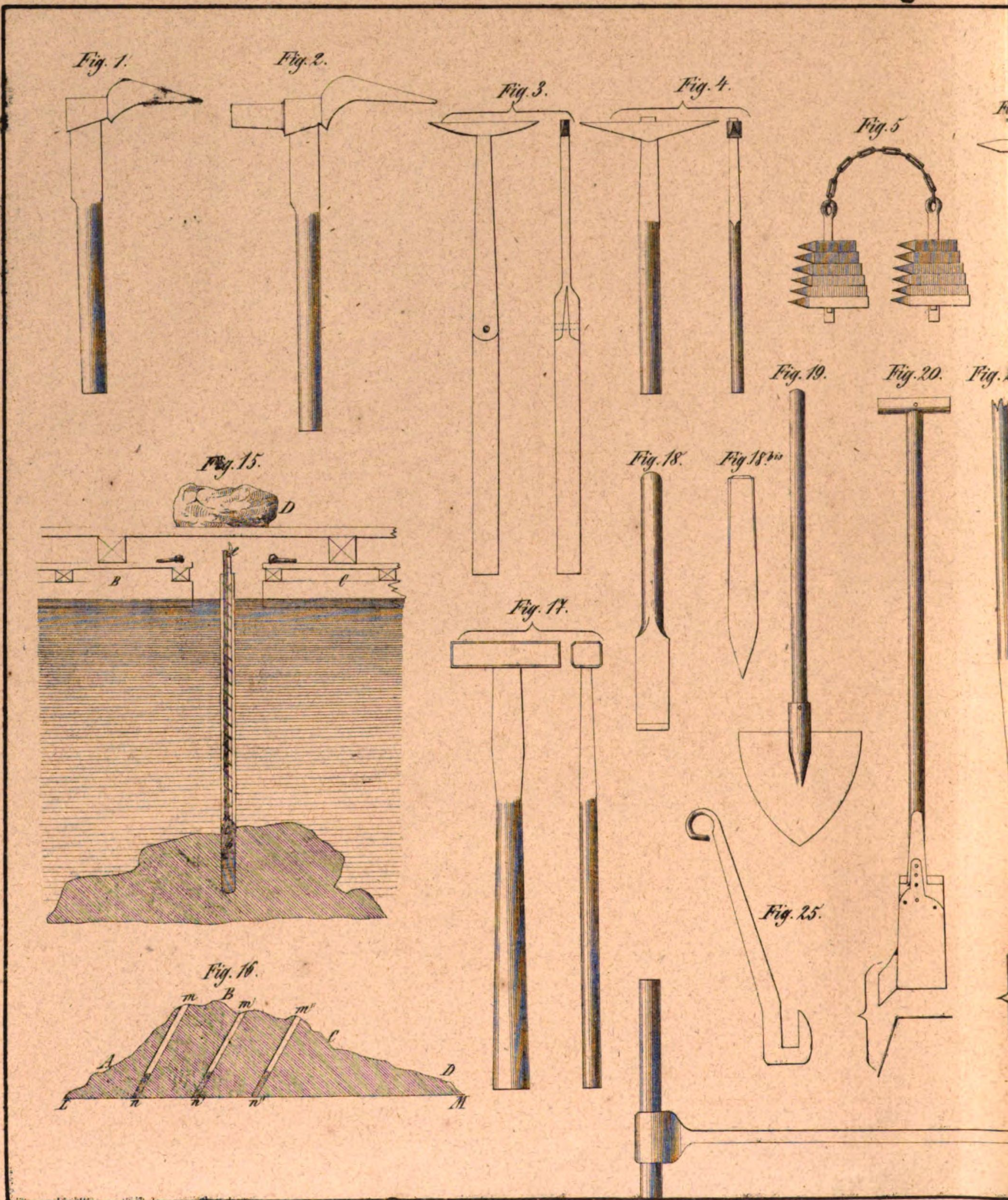

Tretrad
zum Abbohren.
Fig. 1.
e
Fig. 5.
A
c
a
Fig. 2.
c
b
a
b
e
Fig. 3.
e
Fig. 4.
Fig. 11.
Fig. 8.
Fig. 12.

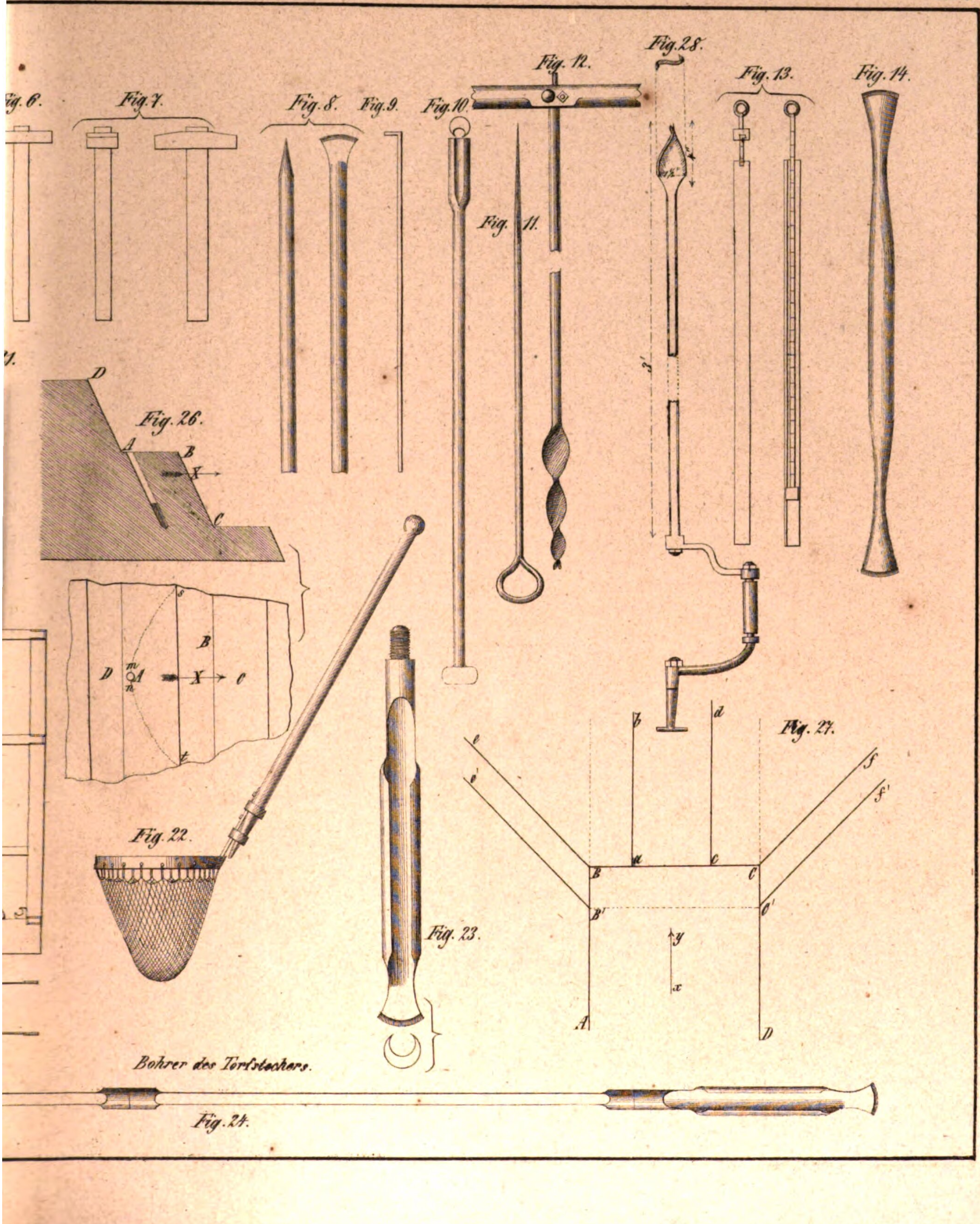

Gerüst zum Seilbohren.
Aufriss.
Fig. 6.
Grundriss.
Fig. 7.
Fig. 9.
Fig. 10.
Fig. 11.
b b
e e
d
A


Fig. 1.
Fig. 2.
Fig. 3.
Fig. 4
Fig. 5.
Fig. 13.
Stange mit Schieber oder
Fig. 17.
Fig. 18.
Fig. 19.


Fig. 8.
Fig. 9.
Fig. 7.
Fig. 6.
Fig. 11.
Fig. 10.
Fig. 12.
dstück.
Fig. 14.
Fig. 15.
Fig. 16.

Bergmänni


Fig. 1.
Fig. 2.
Fig. 3.
Fig. 4.
Fig. 5
Fig. 15.
D
B
C
Fig. 16.
m
B
m'
m''
A
C
D
L
n
n'
n''
M
Fig. 17.
Fig. 18.
Fig. 18 bis
Fig. 19.
Fig. 20.
Fig. 25.


Fig. 6.
Fig. 7.
Fig. 8.
Fig. 9.
Fig. 10.
Fig. 11.
Fig. 12.
Fig. 28.
Fig. 13.
Fig. 14.
Fig. 26.
D
A
B
X
C
s
m
A
n
t
Fig. 22.
Fig. 23.
Fig. 27.
b
d
e
e'
f
f'
a
c
B
C
B'
C'
y
x
A
D
3'
Bohrer des Torfstechers.
Fig. 24.

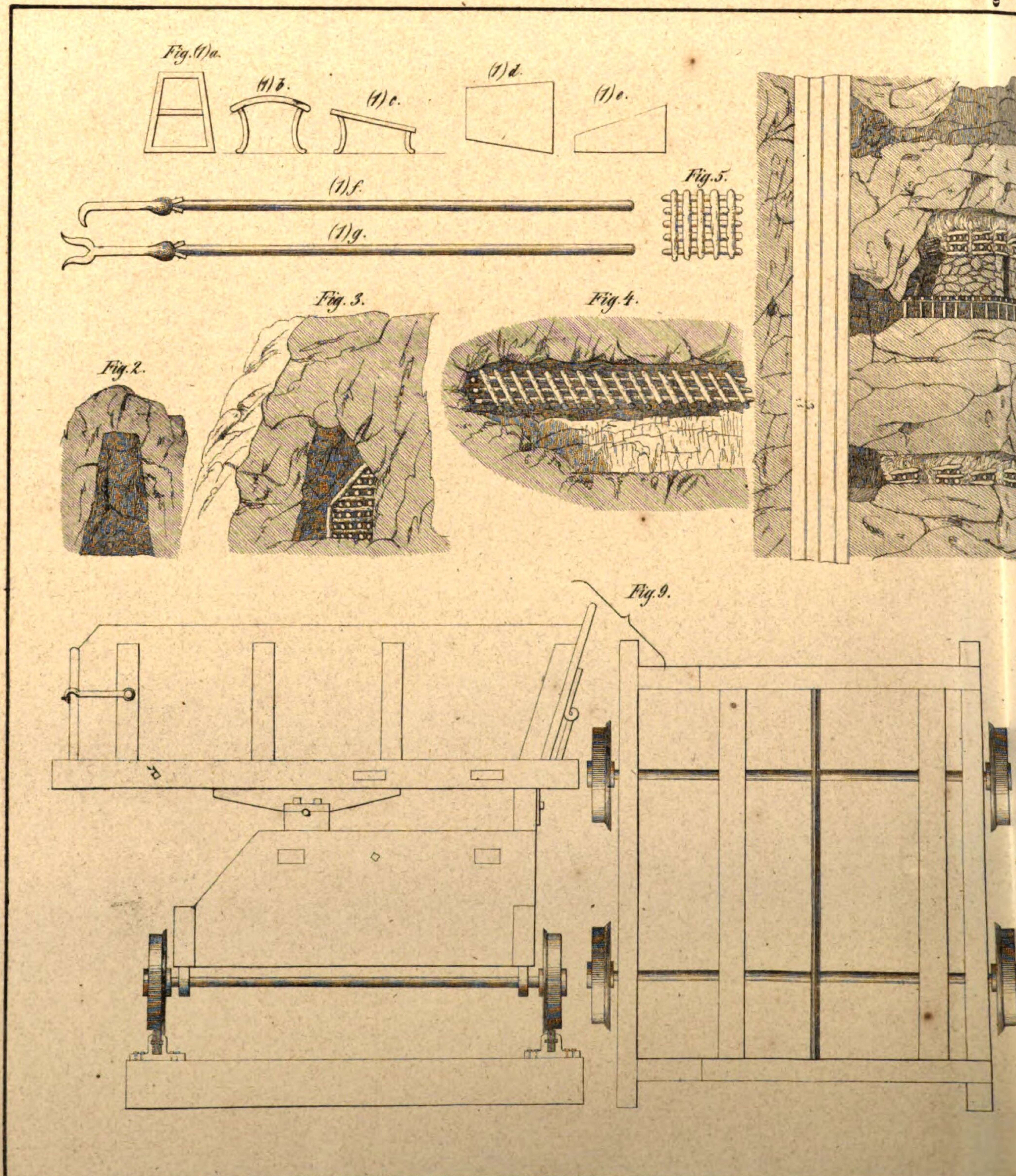

Fig.(1)a.
(1)b.
(1)c.
(1)d.
(1)e.
(1)f.
(1)g.
Fig.5.
Fig.3.
Fig.4.
Fig.2.
Fig.9.

Fig. 6.

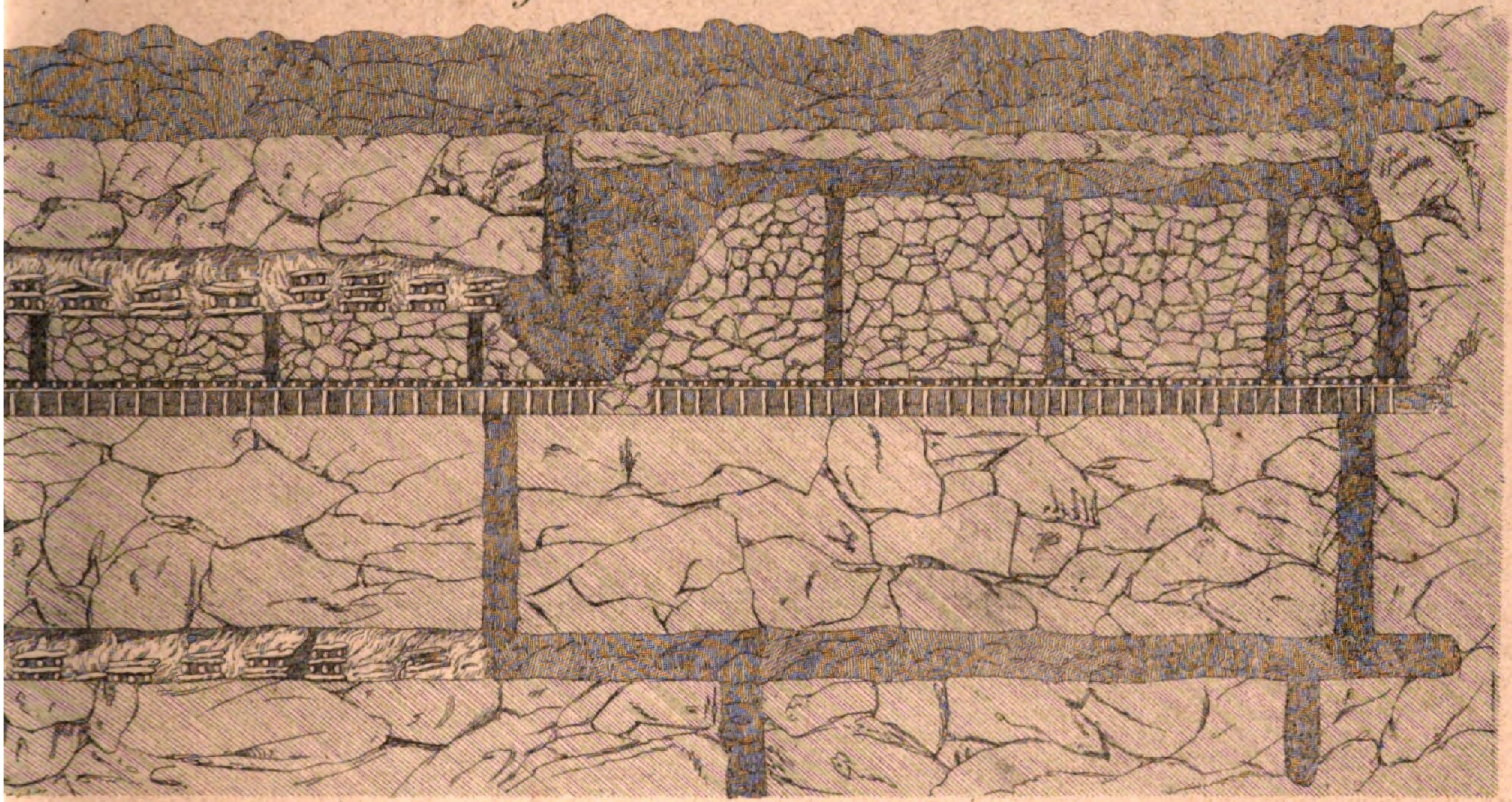


Fig. 12.

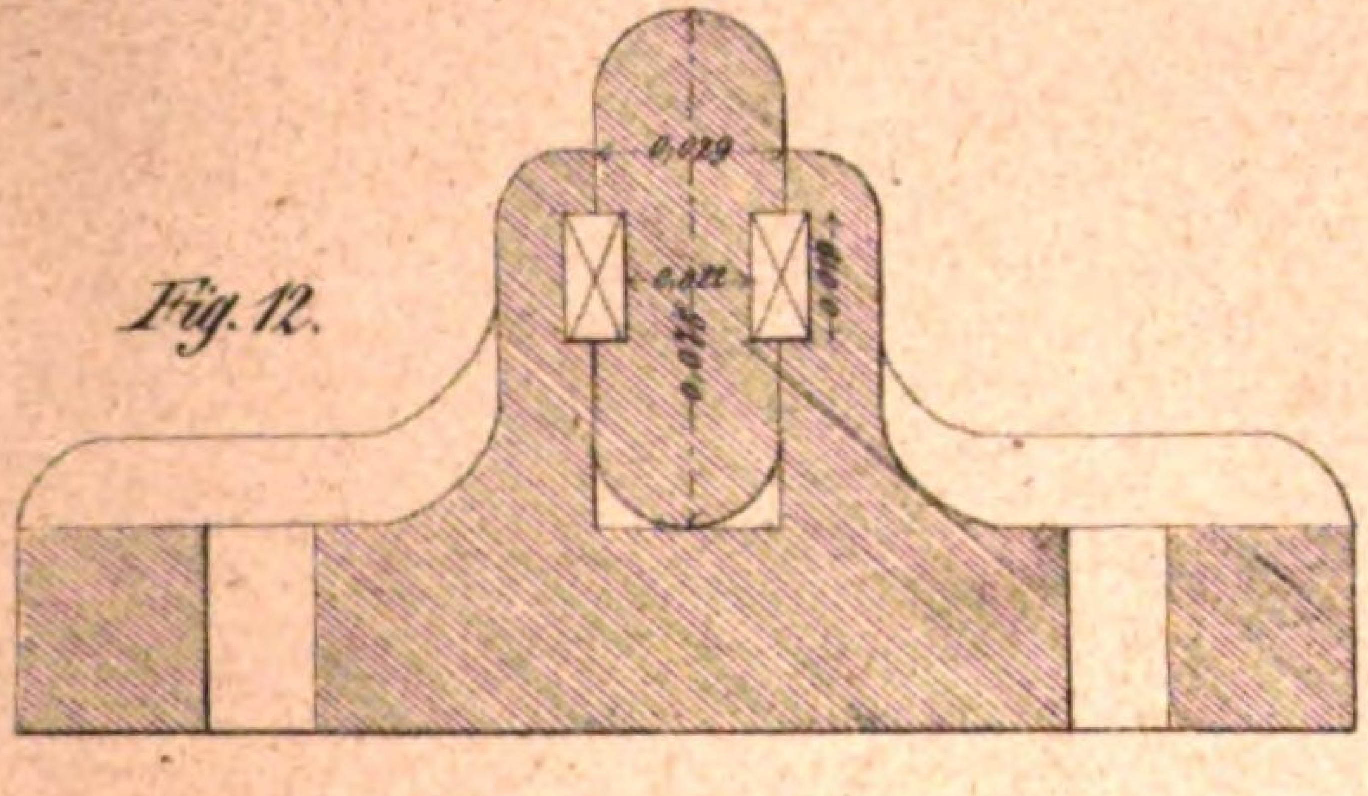
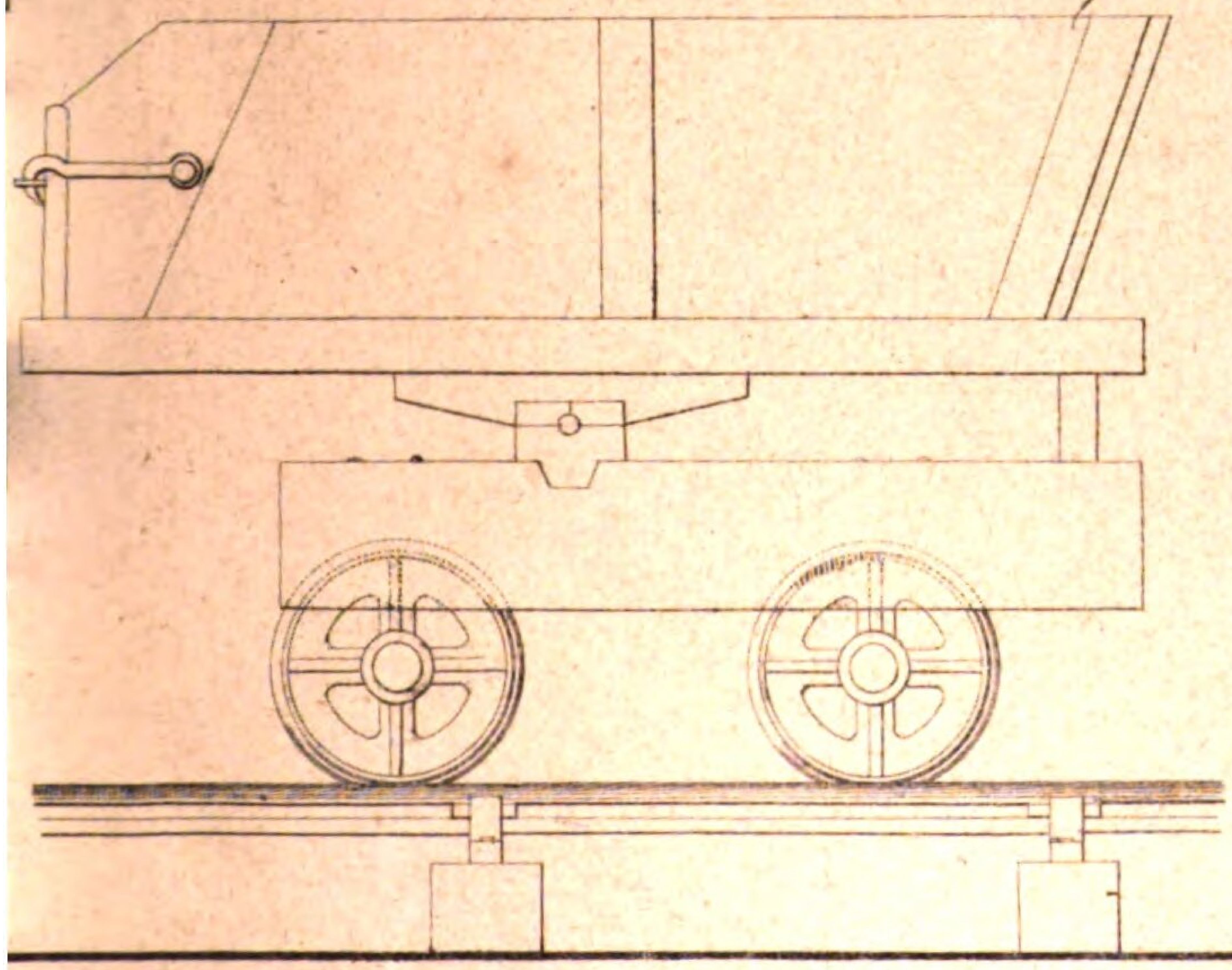
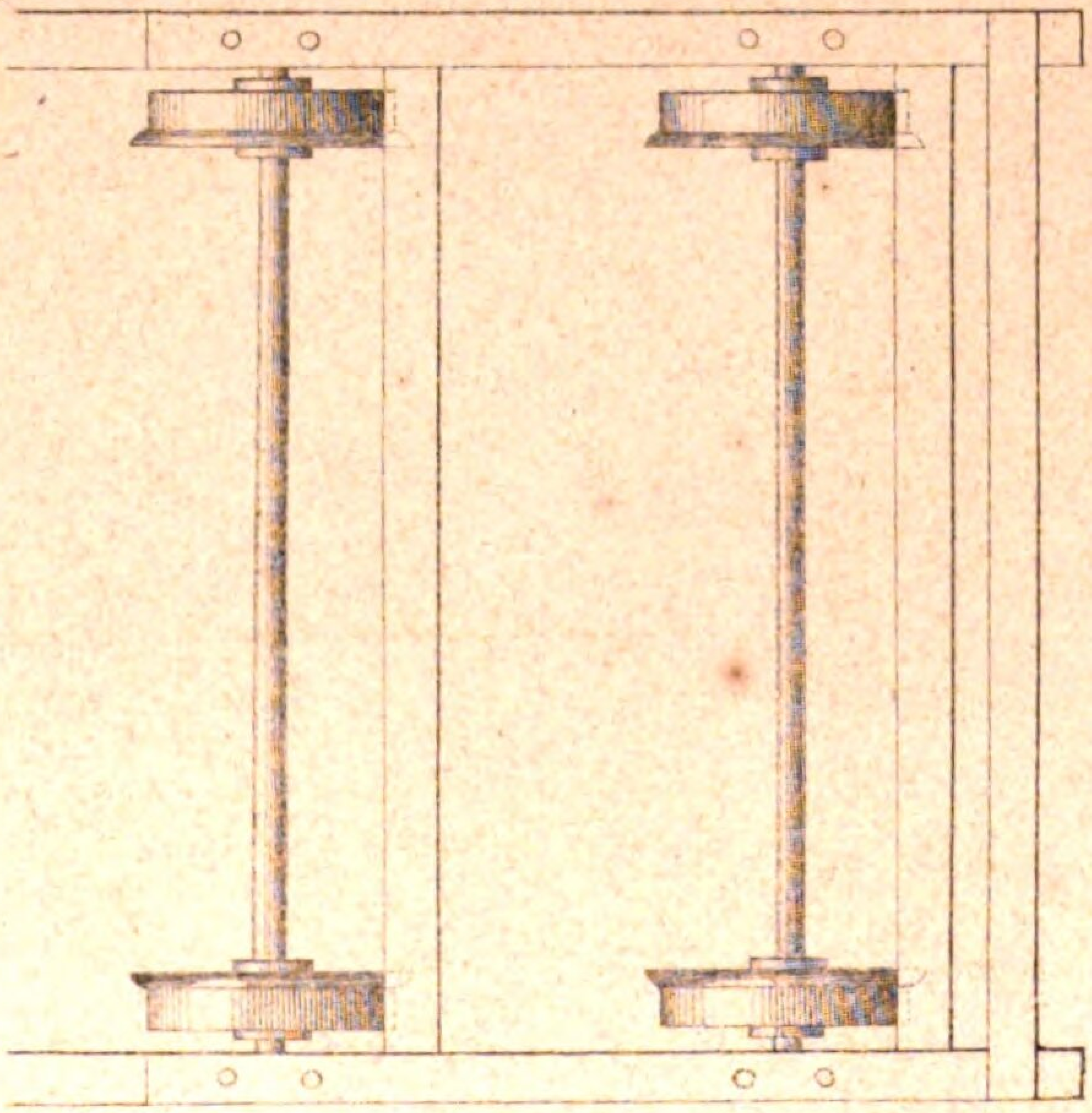


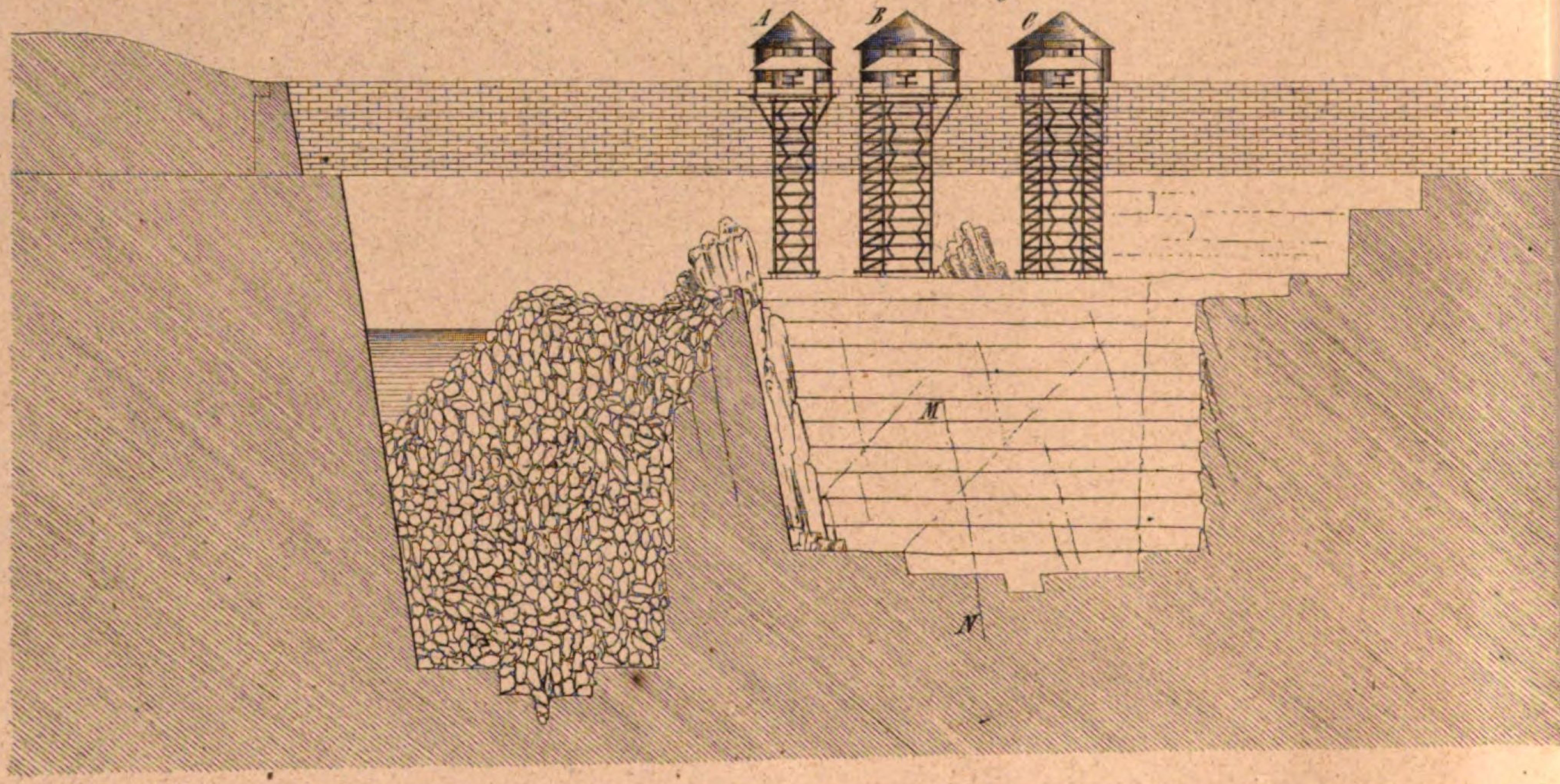
Fig. 10.



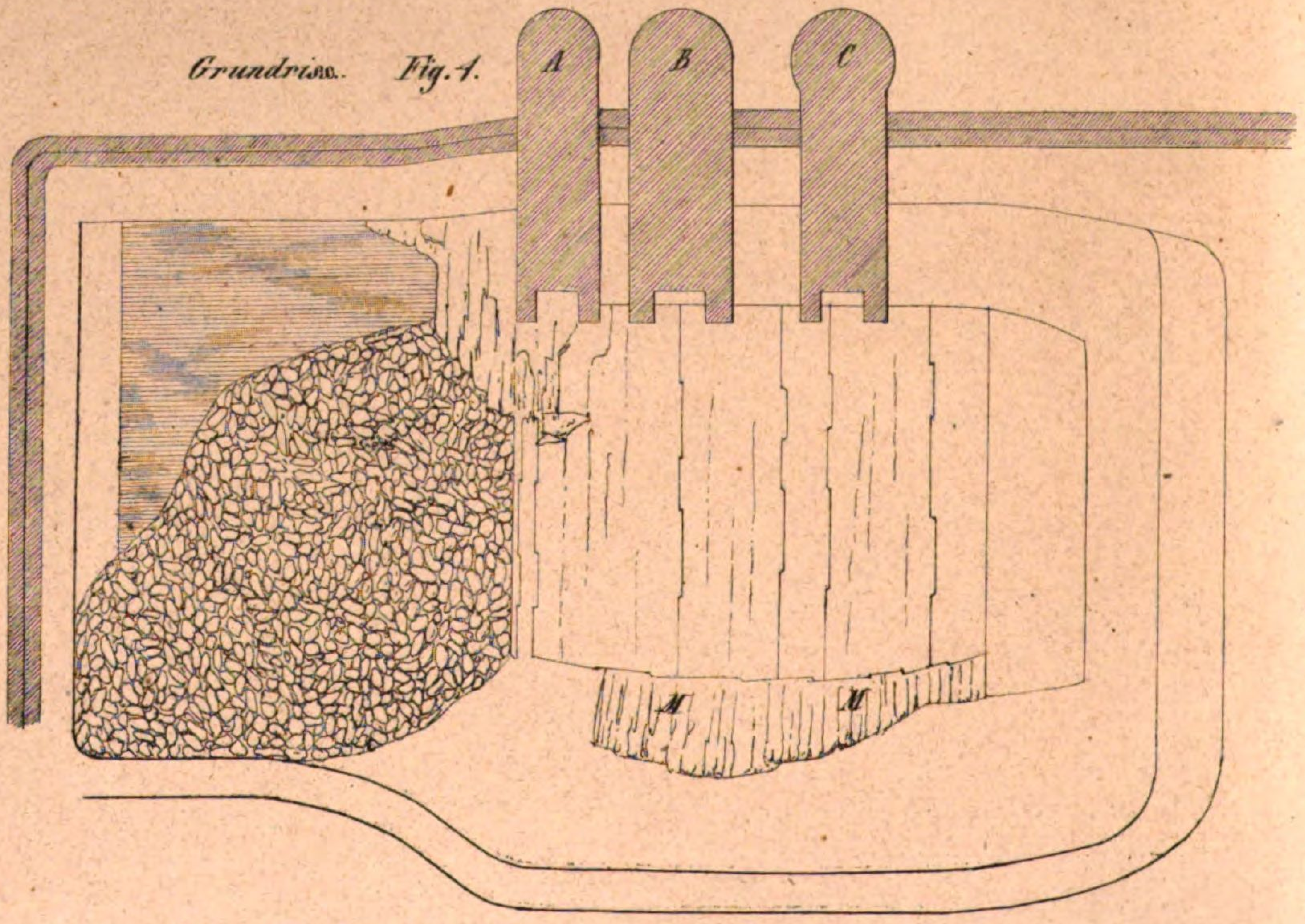


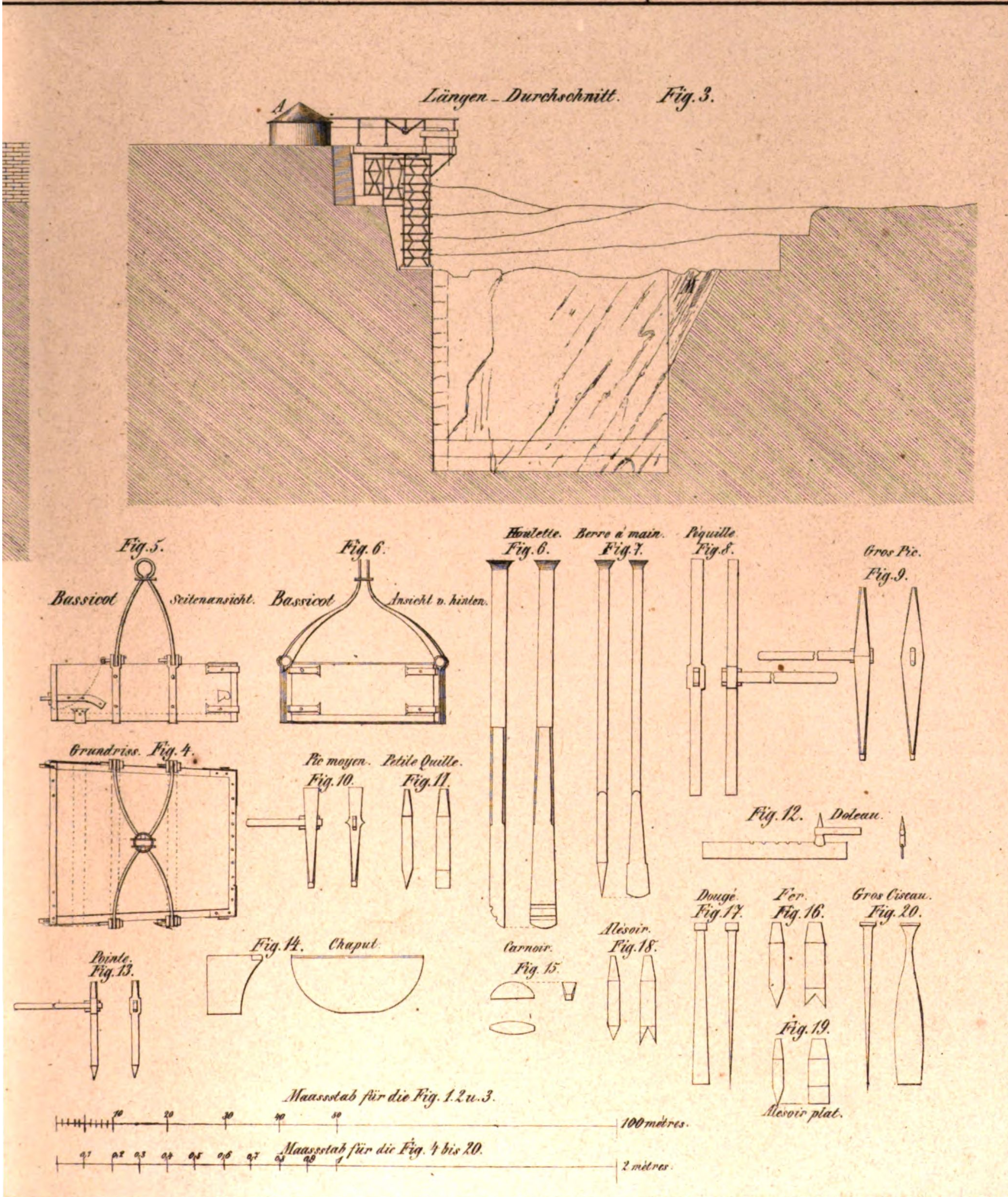
Schieferbruch des Peti

Quer-Durchschnitt. Fig. 2.

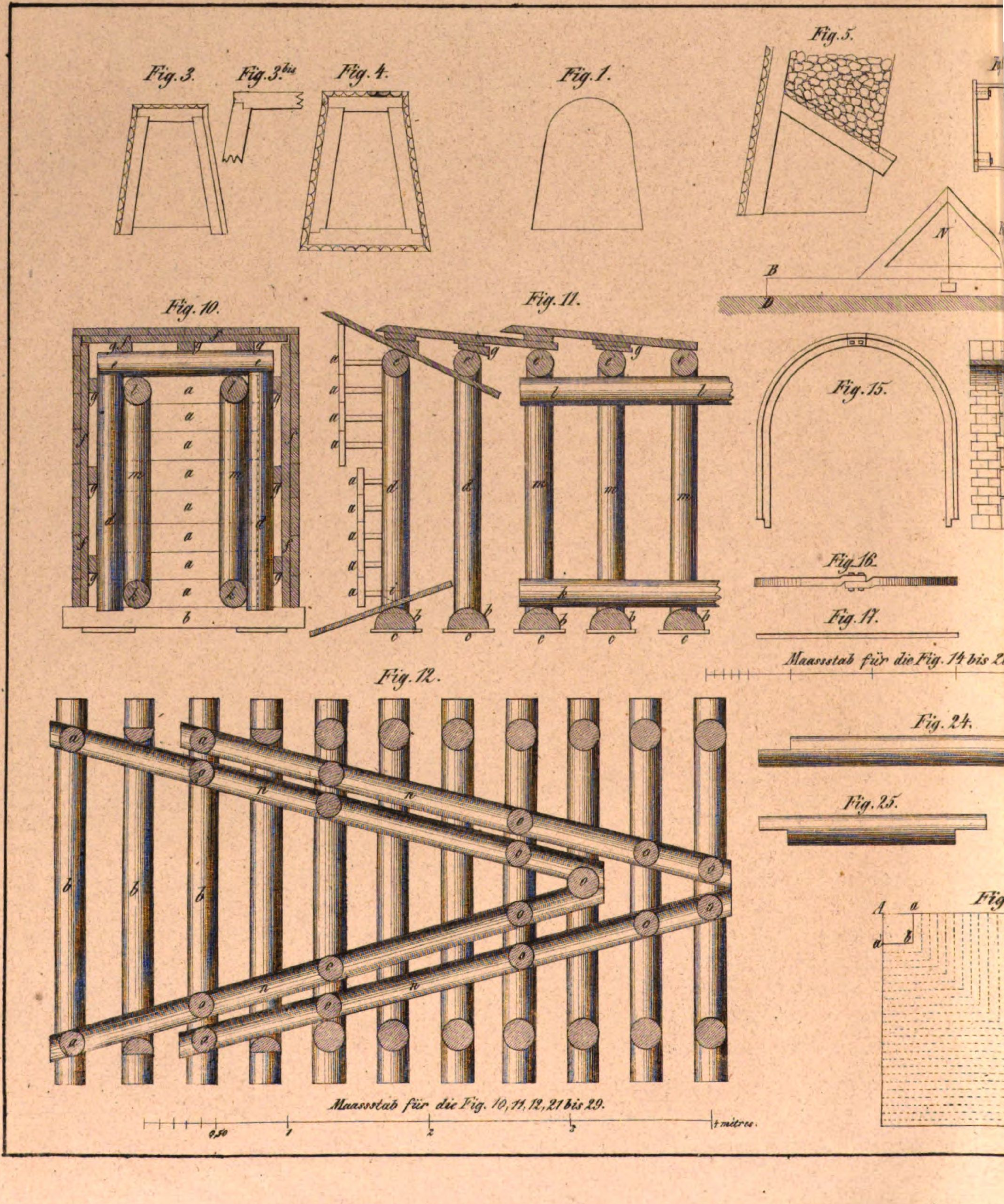


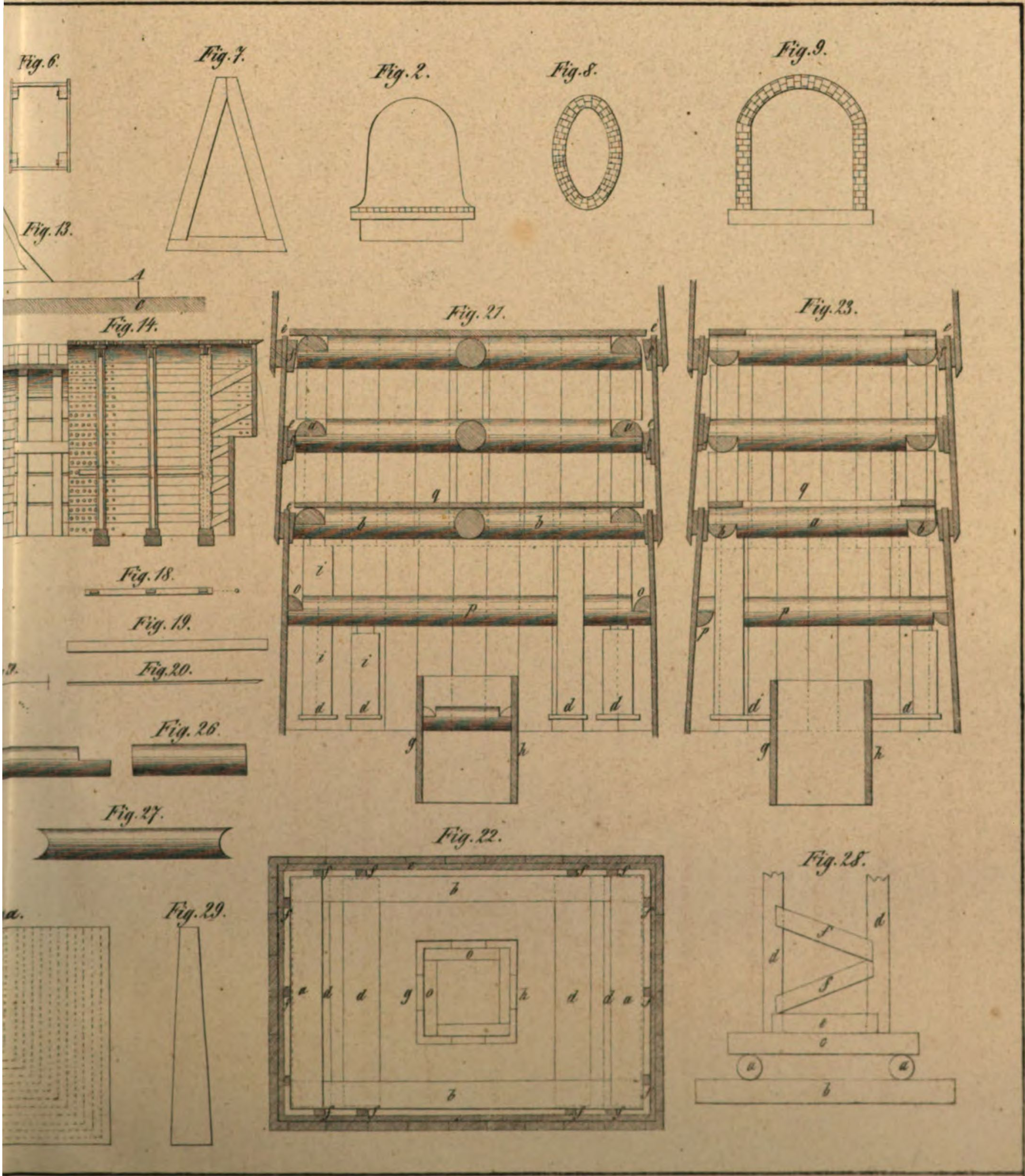
Grundriss. Fig. 1.

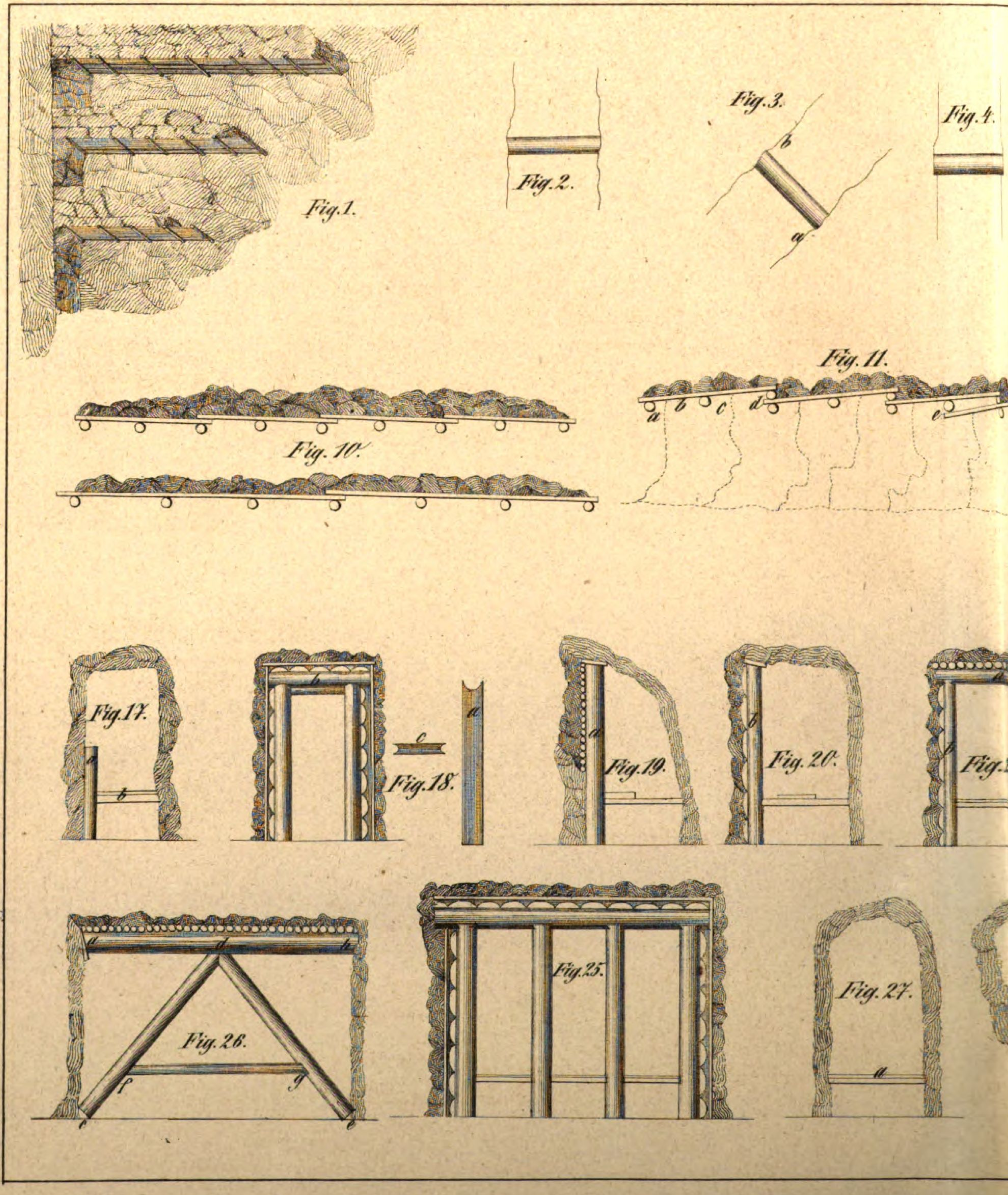


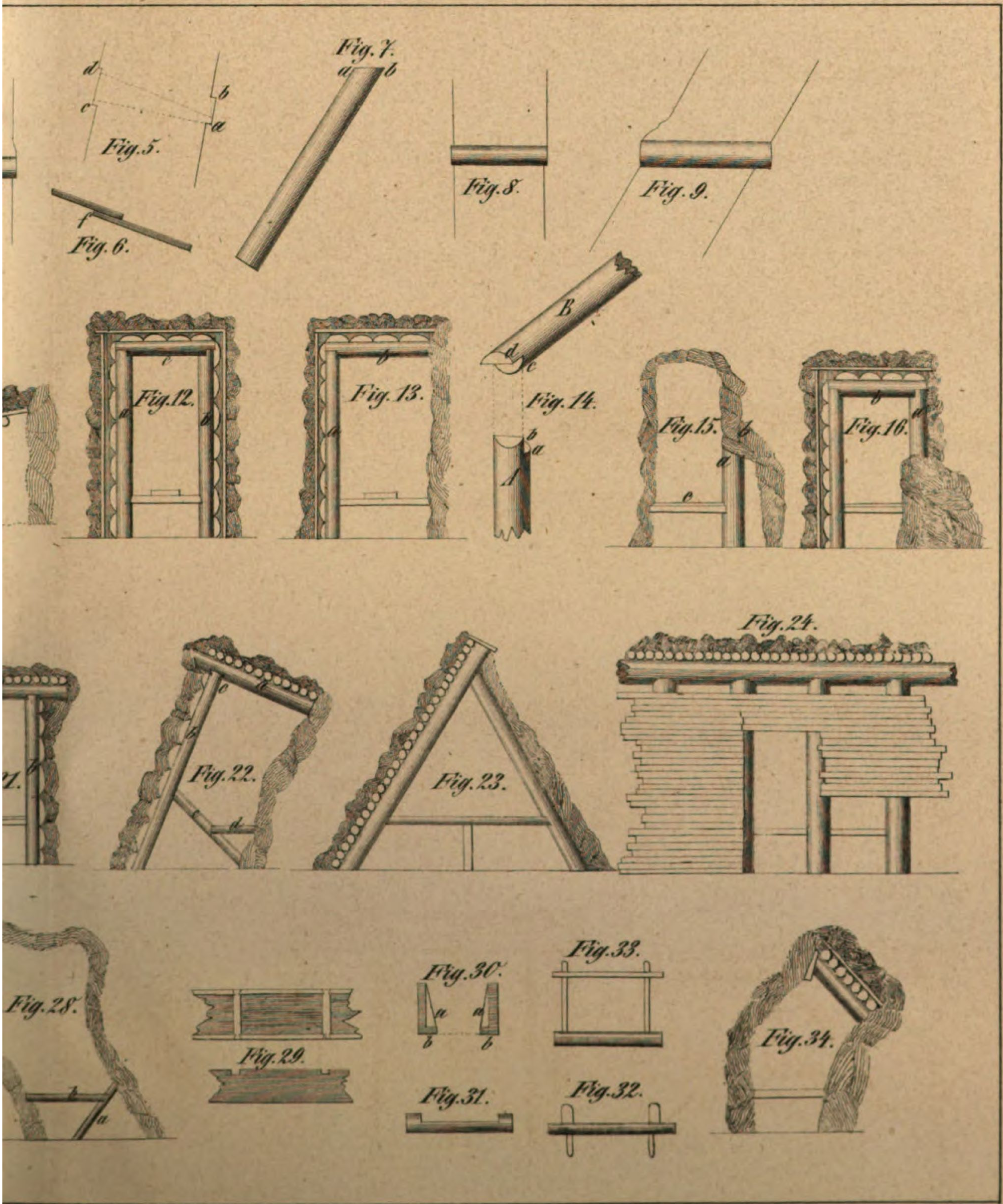

Längen-Durchschnitt. Fig. 3.
A
Fig. 5.
Bassicot
Seitenansicht.
Fig. 6.
Bassicot
Ansicht v. hinten.
Houlette. Fig. 6.
Berre à main. Fig. 7.
Pequille Fig. 8.
Gros Pic. Fig. 9.
Grundriss. Fig. 4.
Pic moyen. Fig. 10.
Petite Quille. Fig. 11.
Fig. 12. Doleau.
Dougé. Fig. 17.
Fer. Fig. 16.
Gros Ciseau. Fig. 20.
Alésoir. Fig. 18.
Carnoir. Fig. 15.
Pointe. Fig. 13.
Fig. 14. Chaput.
Fig. 19.
Alesoir plat.
Maassstab für die Fig. 1.2 u. 3.
10 20 30 40 50
100 mètres.
Maassstab für die Fig. 4 bis 20.
0,1 0,2 0,3 0,4 0,5 0,6 0,7 0,8 0,9 1
2 mètres.

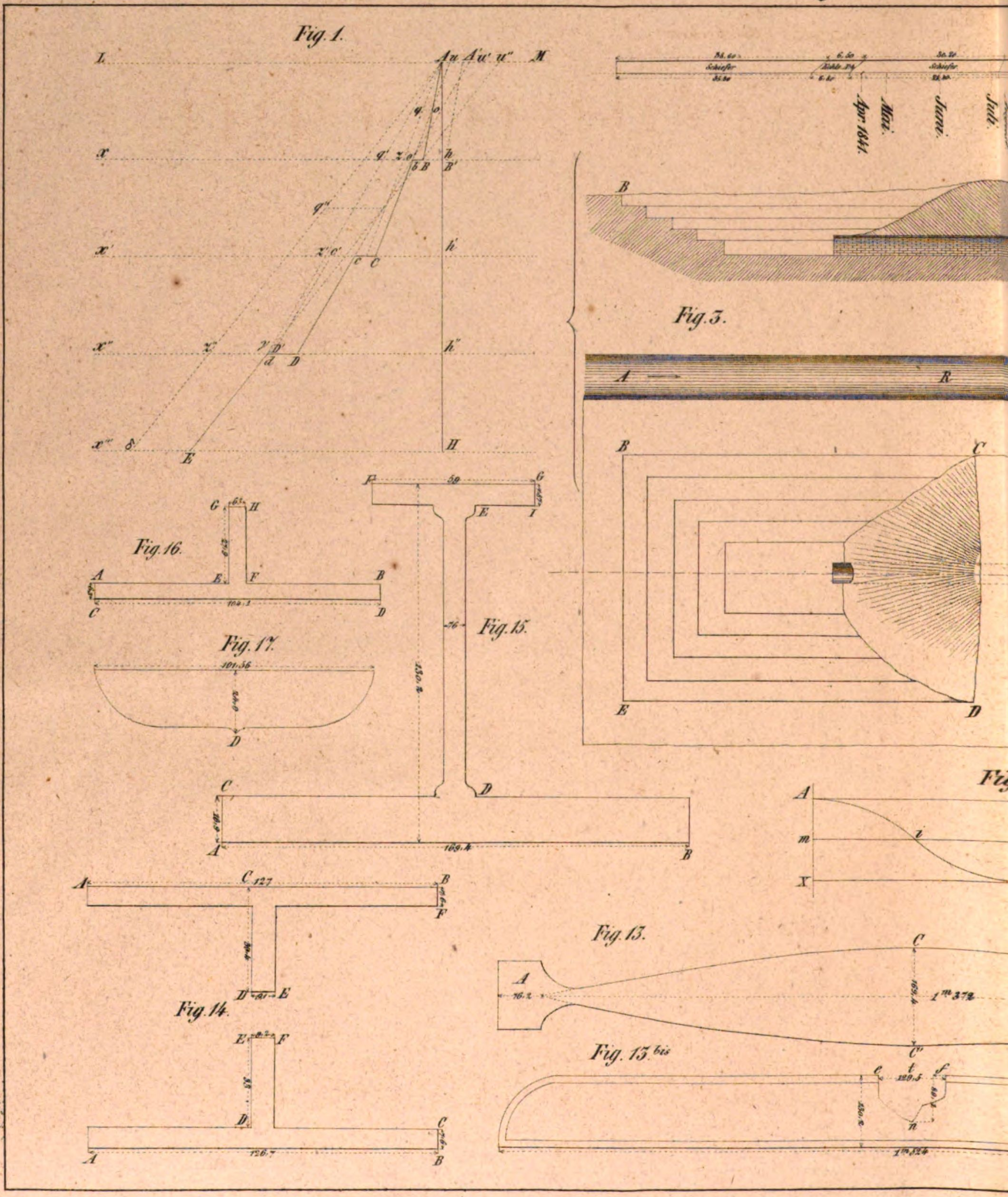
Strecken.


Fig. 3.
Fig. 3.bis
Fig. 4.
Fig. 1.
Fig. 5.
Fig. 10.
Fig. 11.
Fig. 15.
Fig. 16.
Fig. 17.
Maassstab für die Fig. 14 bis 2
Fig. 12.
Fig. 24.
Fig. 25.
Maassstab für die Fig. 10, 11, 12, 21 bis 29.
0,50
1
2
3
4 mètres.


Fig. 6.
Fig. 7.
Fig. 2.
Fig. 8.
Fig. 9.
Fig. 13.
Fig. 14.
Fig. 21.
Fig. 23.
Fig. 18.
Fig. 19.
Fig. 20.
Fig. 26.
Fig. 27.
Fig. 22.
Fig. 28.
Fig. 29.


Fig. 1.
Fig. 2.
Fig. 3.
Fig. 4.
Fig. 10.
Fig. 11.
Fig. 17.
Fig. 18.
Fig. 19.
Fig. 20.
Fig. 25.
Fig. 26.
Fig. 27.


Fig.5.
Fig.6.
Fig.7.
Fig.8.
Fig.9.
Fig.12.
Fig.13.
Fig.14.
Fig.15.
Fig.16.
Fig.22.
Fig.23.
Fig.24.
Fig.28.
Fig.29.
Fig.30.
Fig.31.
Fig.32.
Fig.33.
Fig.34.


Fig. 1.
Schiefer
Apr 1841.
Mai.
Juni.
Juli.
Fig. 3.
Fig. 16.
Fig. 17.
Fig. 15.
Fig. 14.
Fig. 13.
Fig. 13. bis

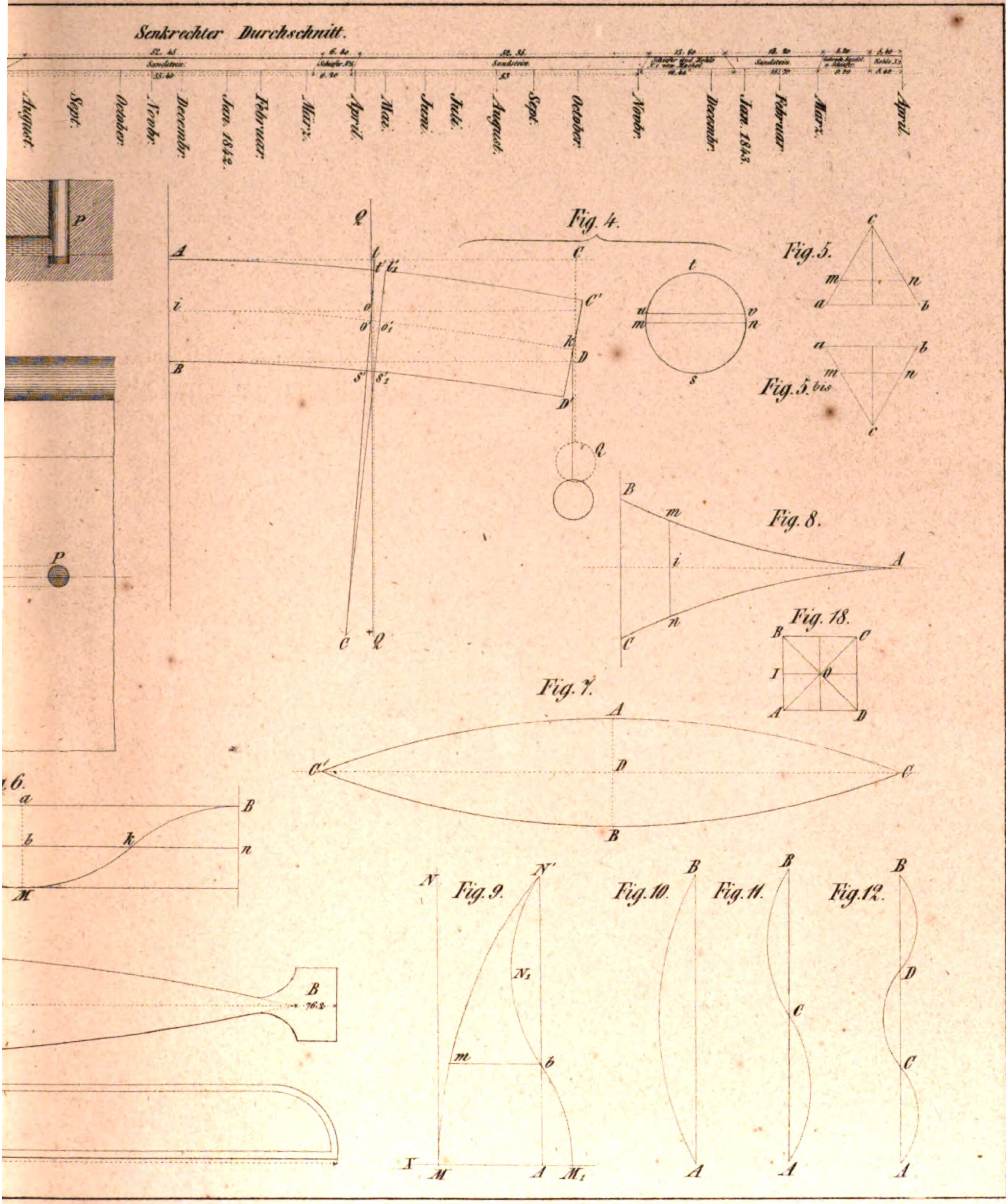
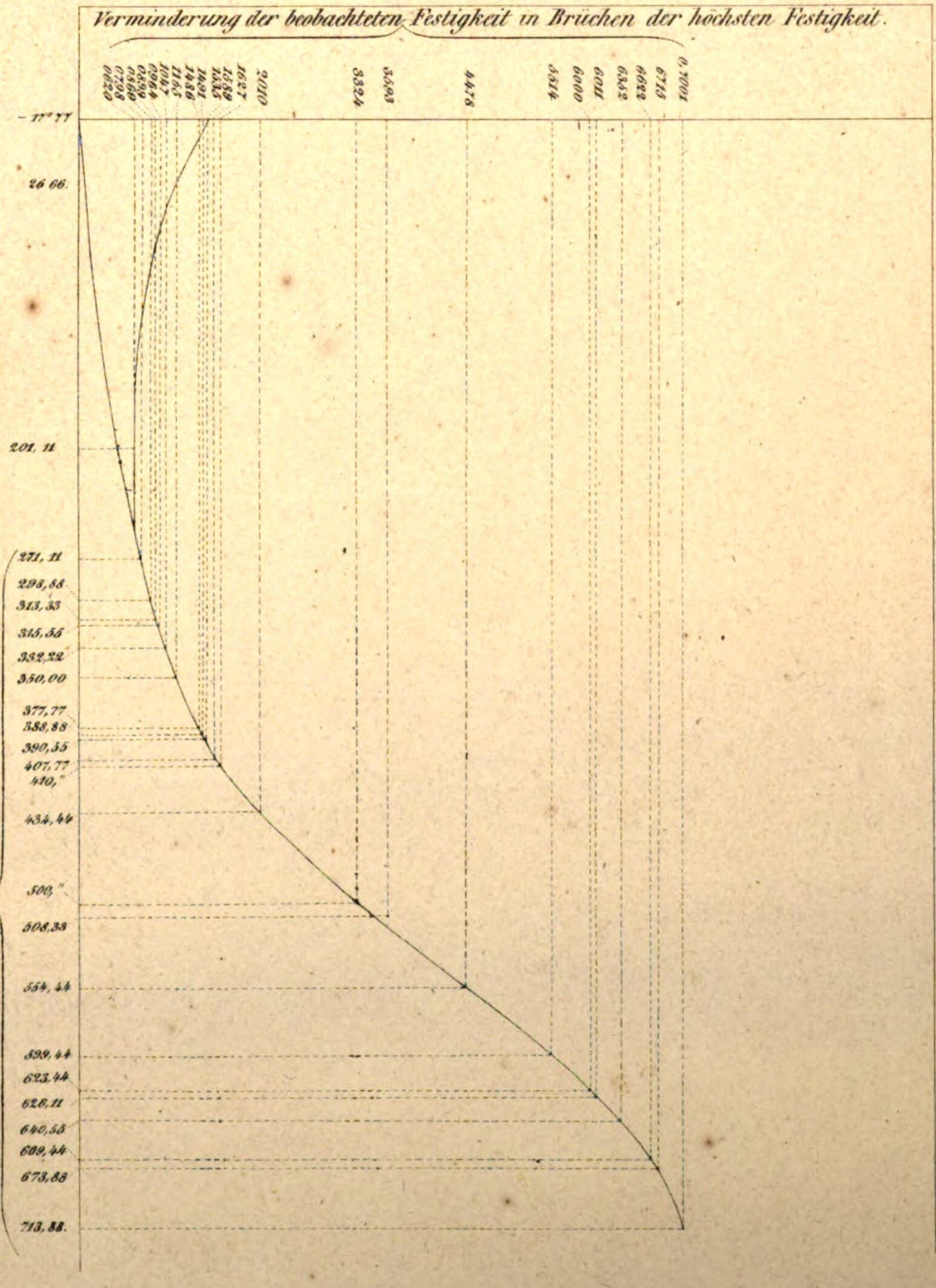

Senkrechter Durchschnitt.
Sandstein.
Schiefer.
August.
Sept.
October.
Novbr.
Decembr.
Jan. 1842.
Februar.
März.
April.
Mai.
Juni.
Juli.
August.
Sept.
October.
Novbr.
Decembr.
Jan. 1843.
Februar.
März.
April.
Fig. 4.
Fig. 5.
Fig. 5. bis
Fig. 8.
Fig. 18.
Fig. 7.
Fig. 9.
Fig. 10.
Fig. 11.
Fig. 12.

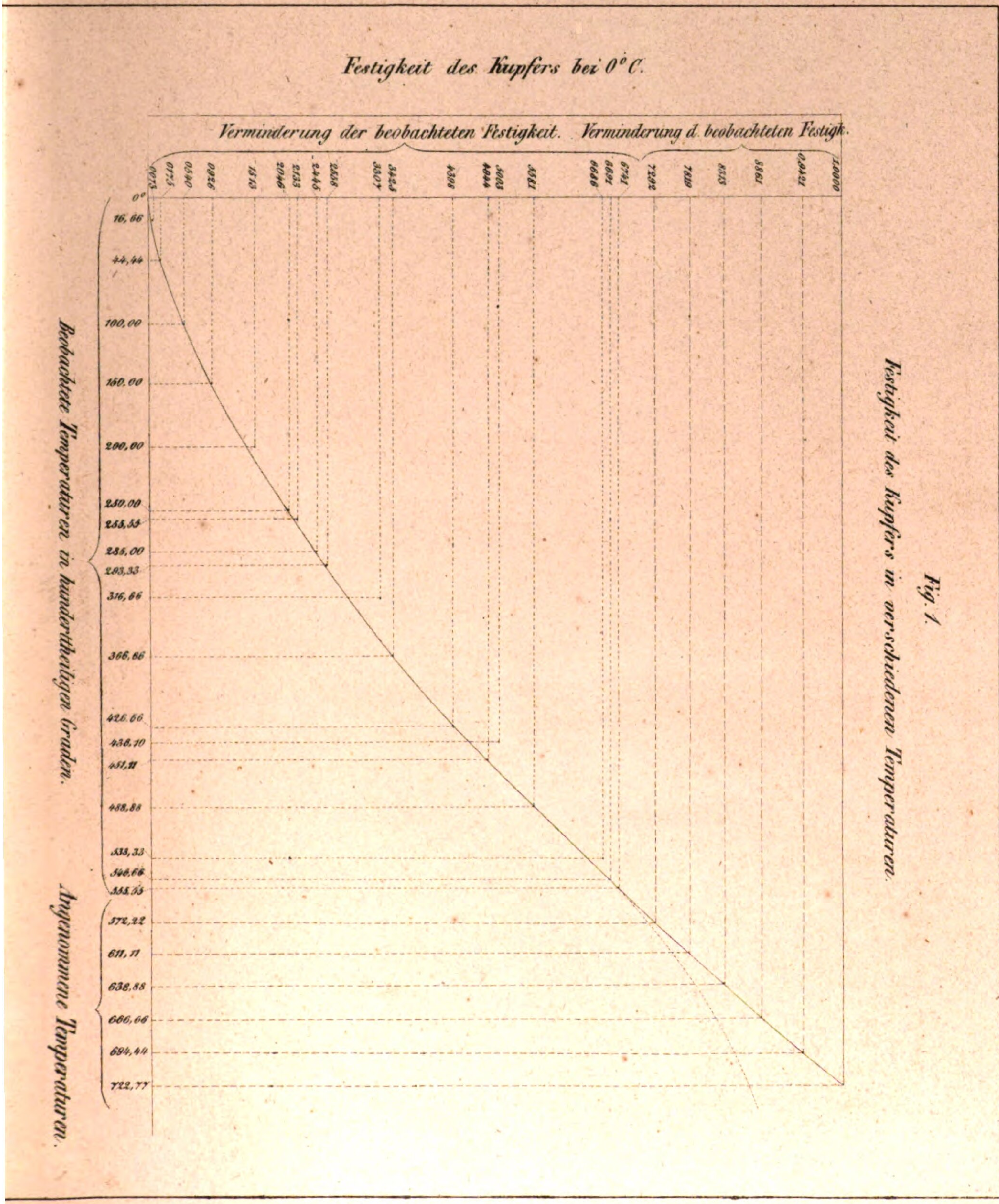
Fig. 2.

Festigkeit des Eisens bei verschiedenen Temperaturen.

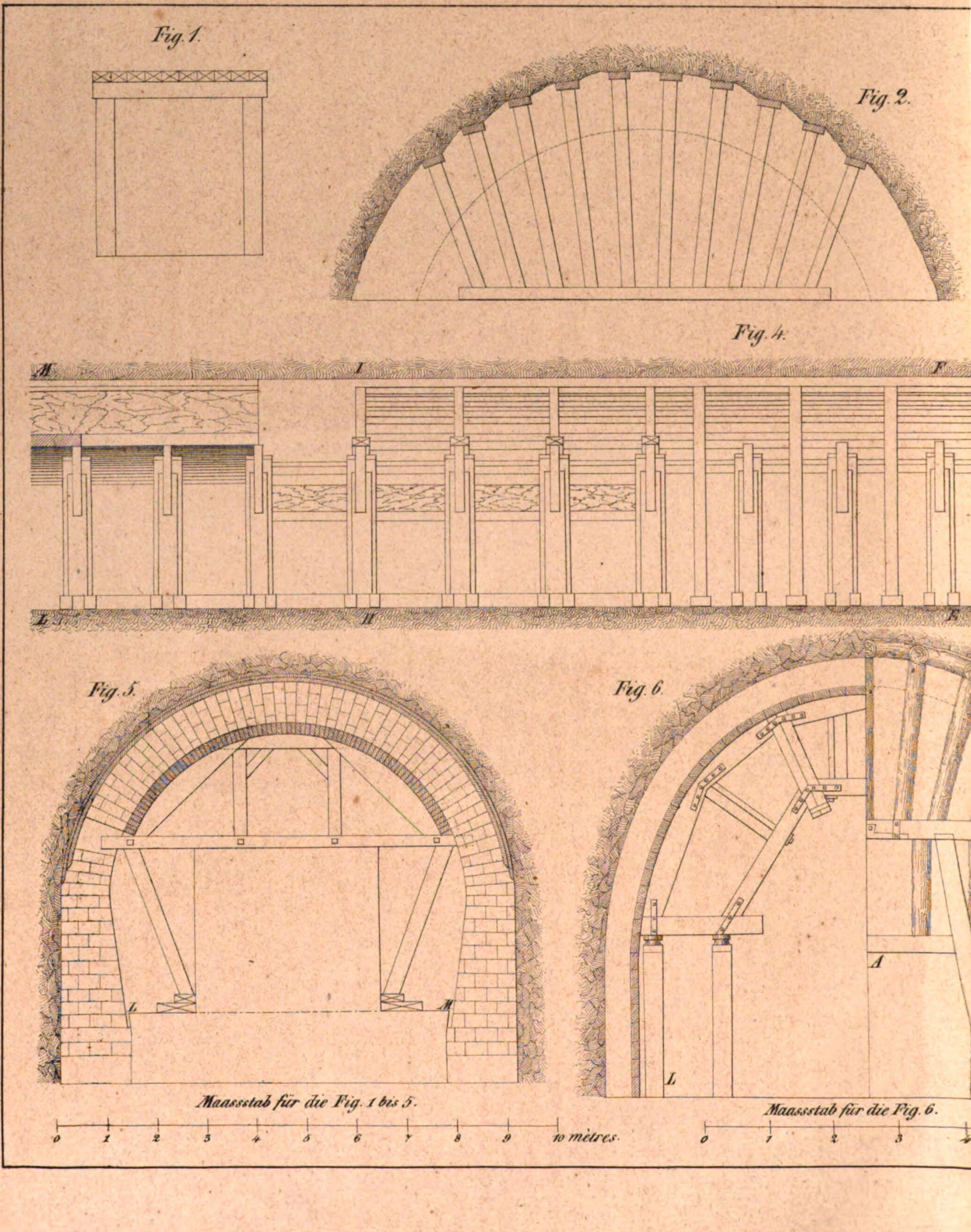
Höchste Festigkeit.

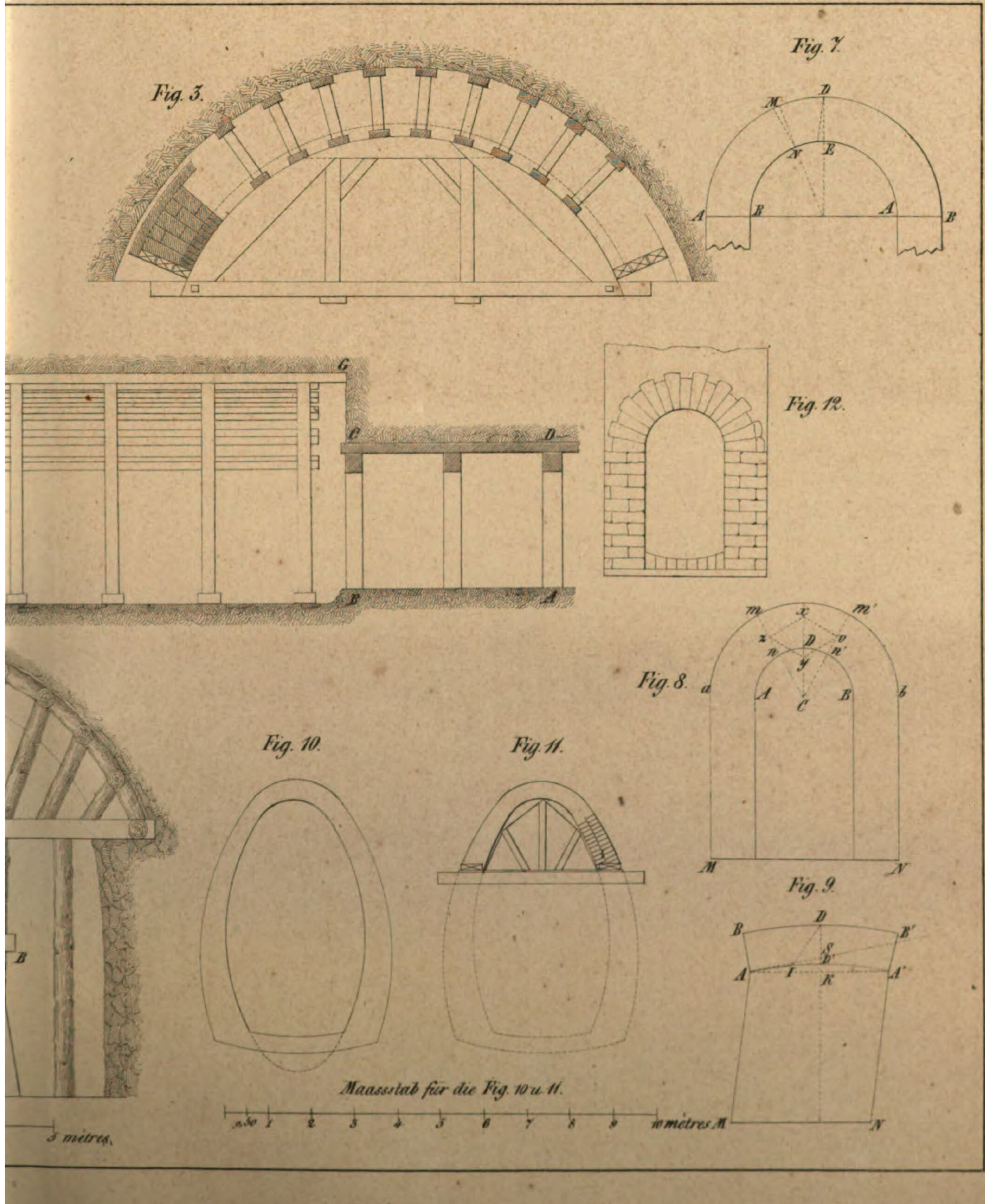


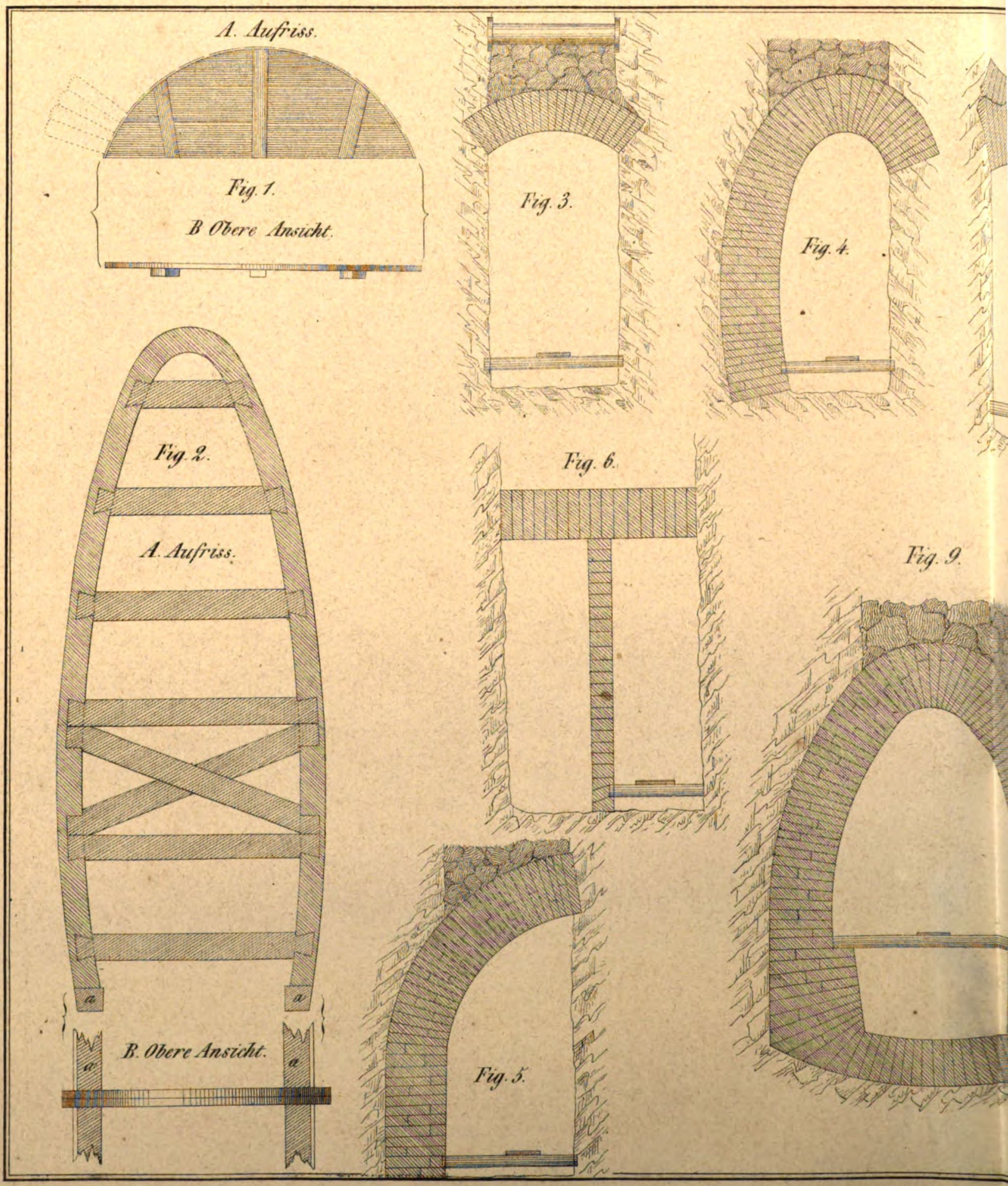
Die Grade des Fahrenheitschen Thermometers sind auf hunderttheiligen Graden reducirt worden.

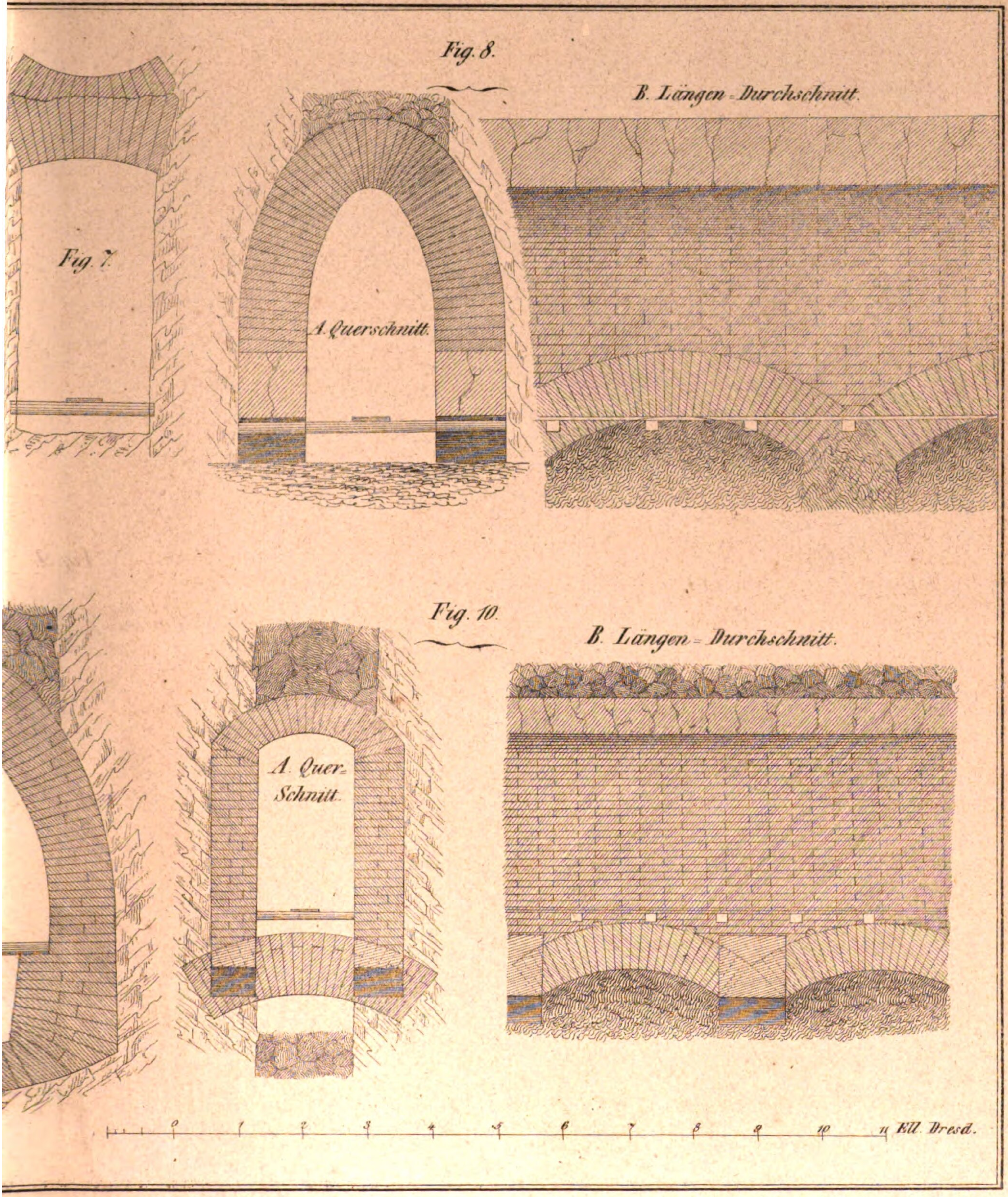

Festigkeit des Kupfers bei 0° C.
Verminderung der beobachteten Festigkeit.
Verminderung d. beobachteten Festigk.
0°
16,66
44,44
100,00
150,00
200,00
250,00
255,55
285,00
293,33
316,66
366,66
426,66
438,10
451,11
488,88
533,33
546,66
555,55
572,22
611,11
638,88
666,66
694,44
722,77
Beobachtete Temperaturen in hunderttheiligen Graden.
Angenommene Temperaturen.
Festigkeit des Kupfers in verschiedenen Temperaturen.
Fig. 1.

XIV


Fig. 1.
Fig. 2.
Fig. 4.
M
I
F
L
H
E
Fig. 5.
L
M
Fig. 6.
A
L
Maassstab für die Fig. 1 bis 5.
0
1
2
3
4
5
6
7
8
9
10 mètres.
Maassstab für die Fig. 6.
0
1
2
3


Fig. 3.
Fig. 7.
Fig. 12.
Fig. 8.
Fig. 10.
Fig. 11.
Fig. 9.
Maasstab für die Fig. 10 u. 11.
10 mètres
5 mètres


A. Aufriss.
Fig. 1.
B Obere Ansicht.
Fig. 2.
A. Aufriss.
B. Obere Ansicht.
a
a
a
a
Fig. 3.
Fig. 4.
Fig. 6.
Fig. 9.
Fig. 5.


Fig. 7.
Fig. 8.
A. Querschnitt.
B. Längen = Durchschnitt.
Fig. 10.
A. Quer=
Schnitt.
B. Längen = Durchschnitt.
0 1 2 3 4 5 6 7 8 9 10 11 Ell. Dresd.

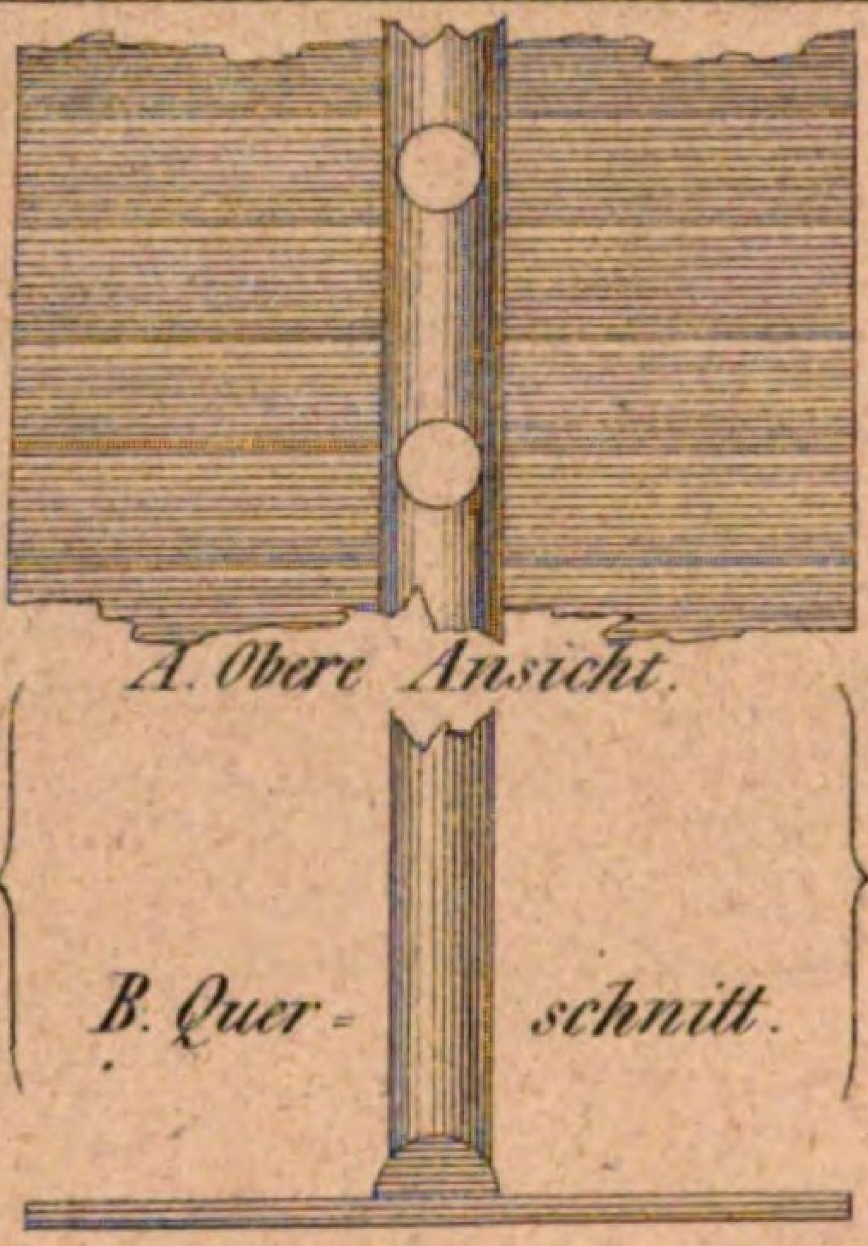


Fig. 1.

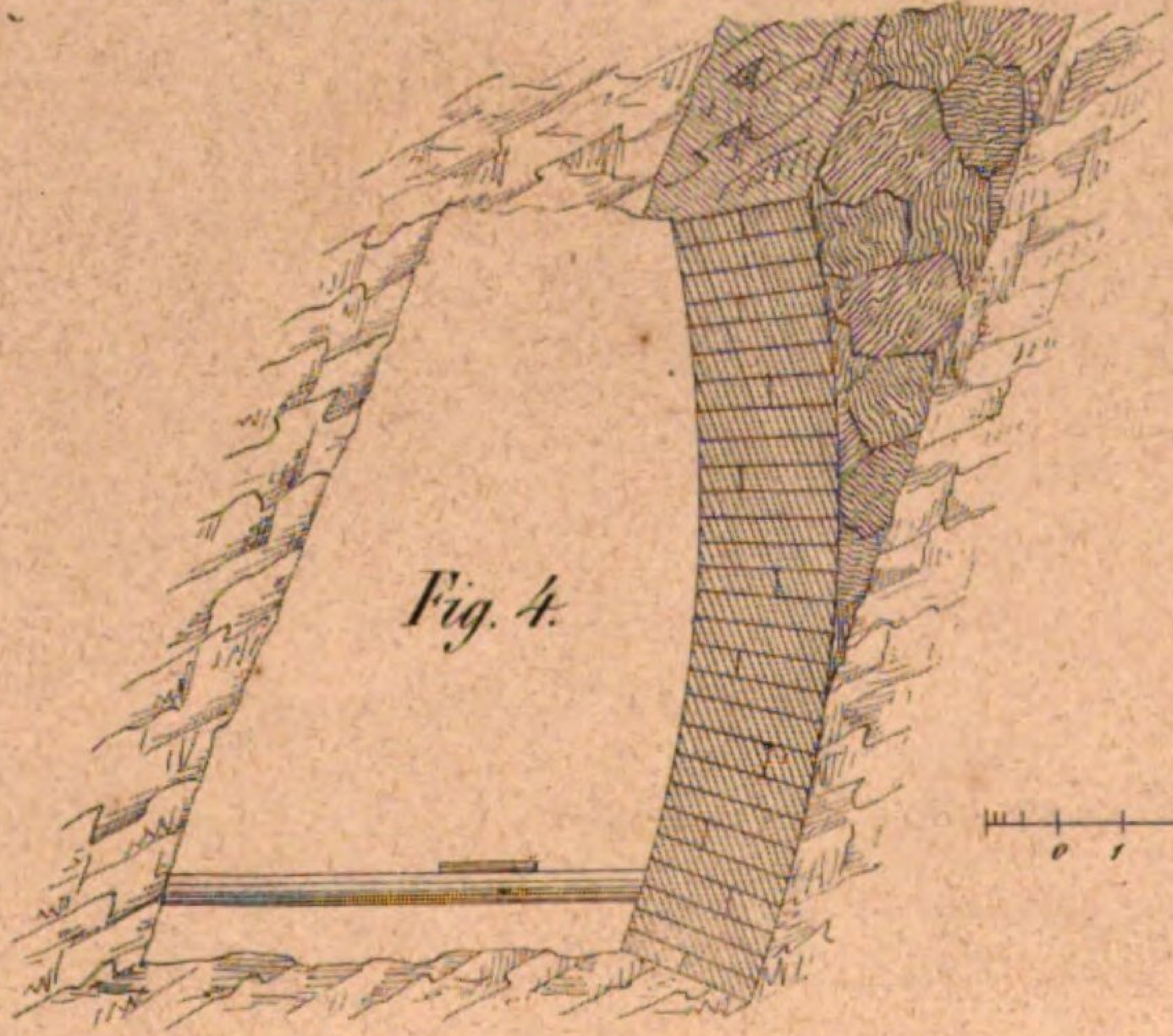


Fig. 4.

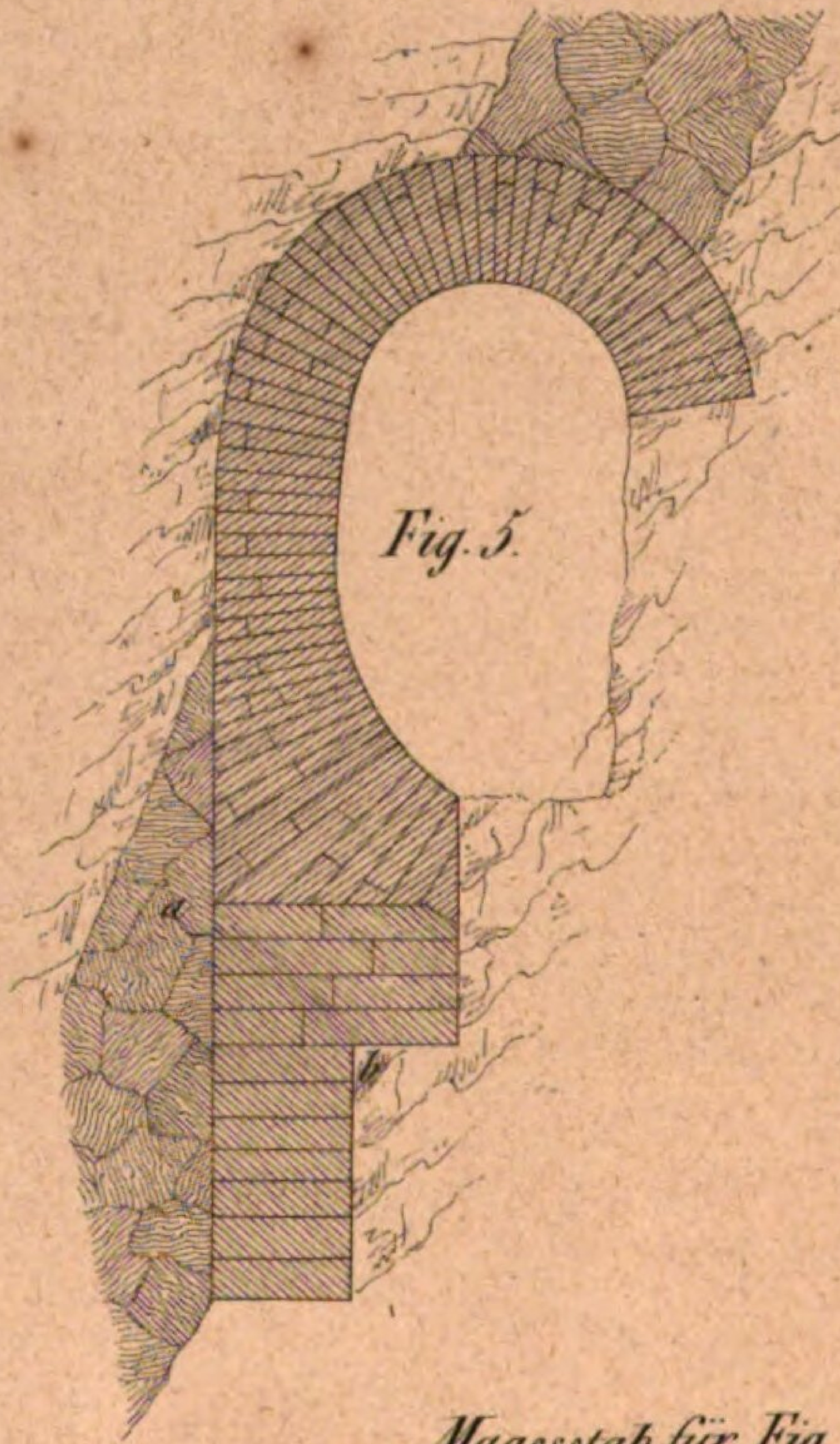
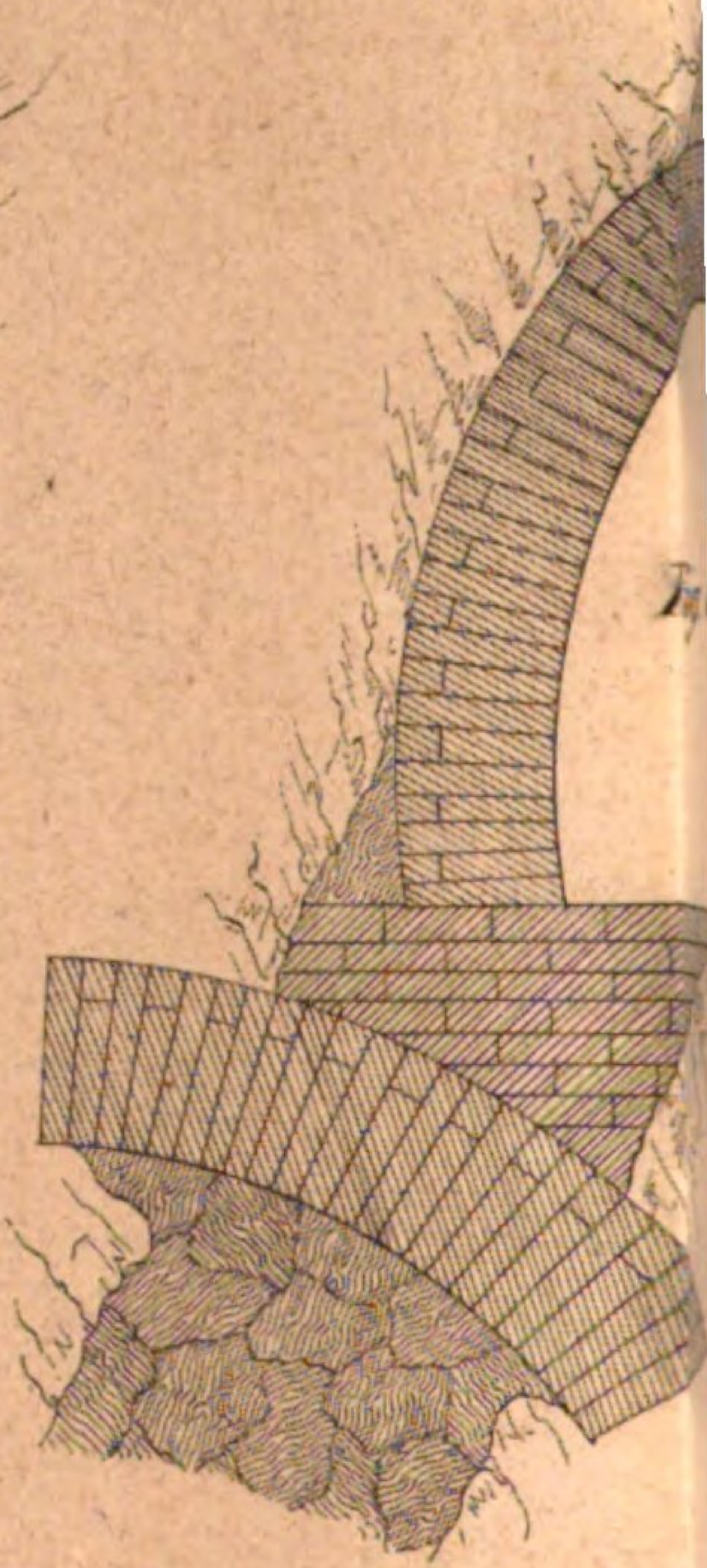


Fig. 5.



Maassstab für Fig. 10.

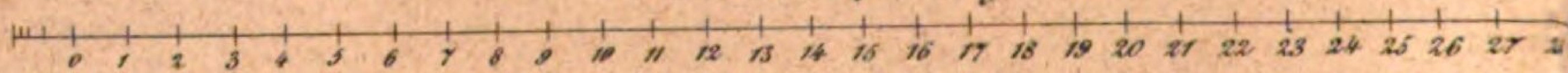


Fig. 8.

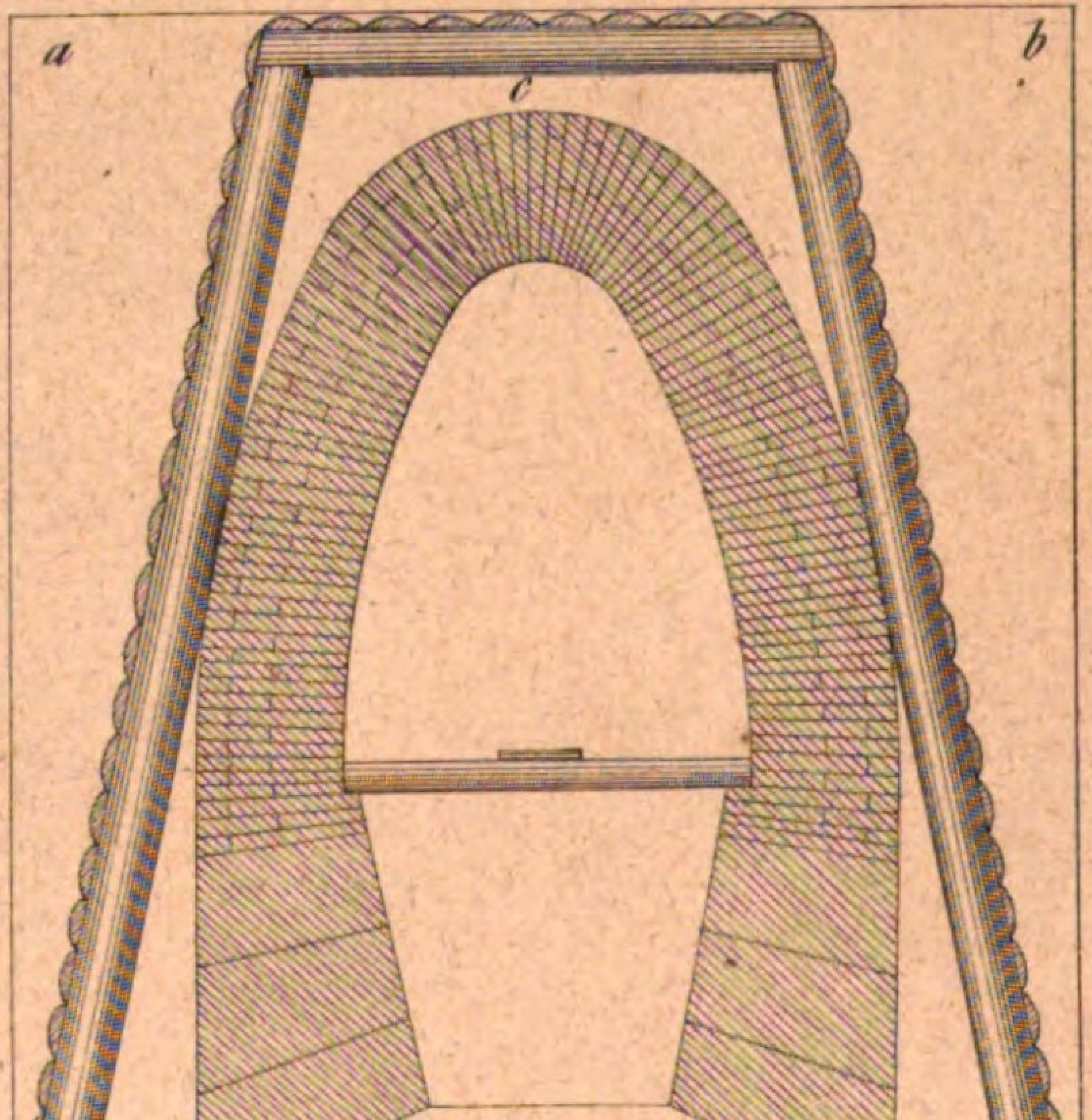
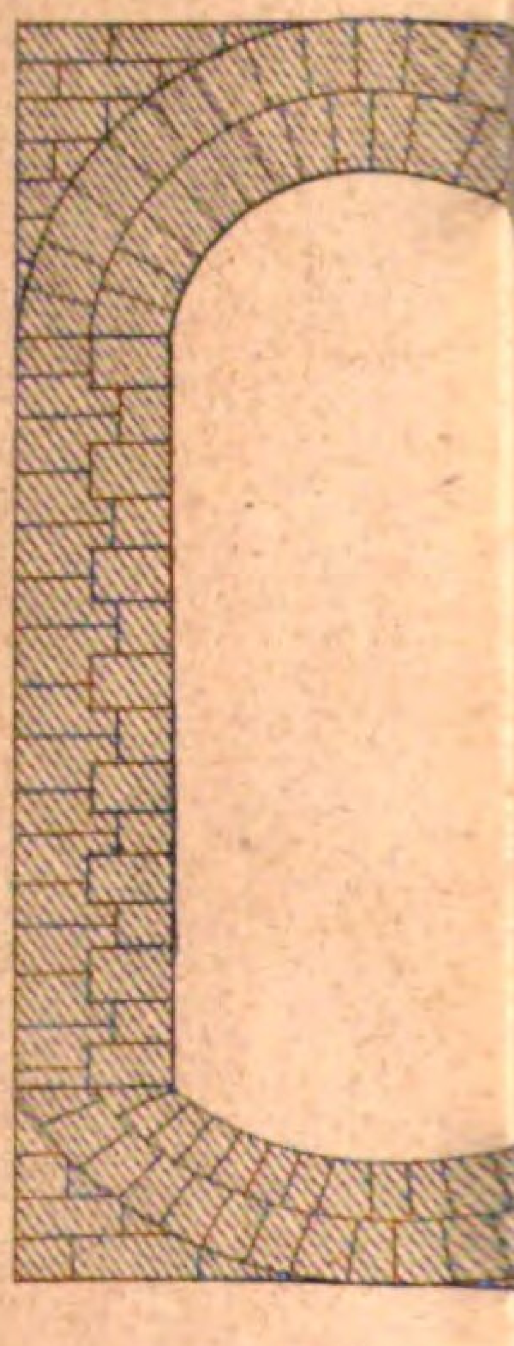


Fig. 9.



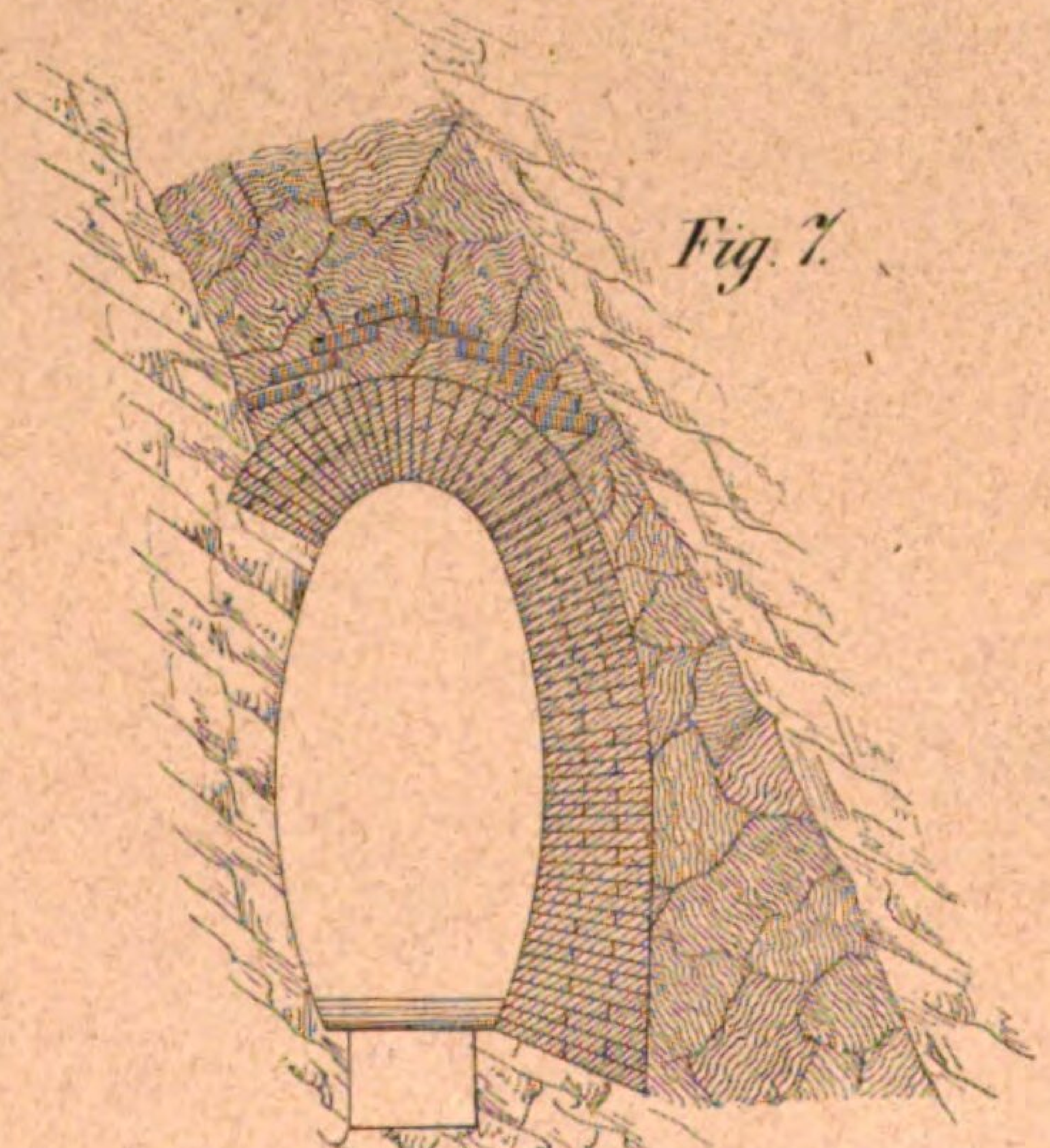


Fig. 7.

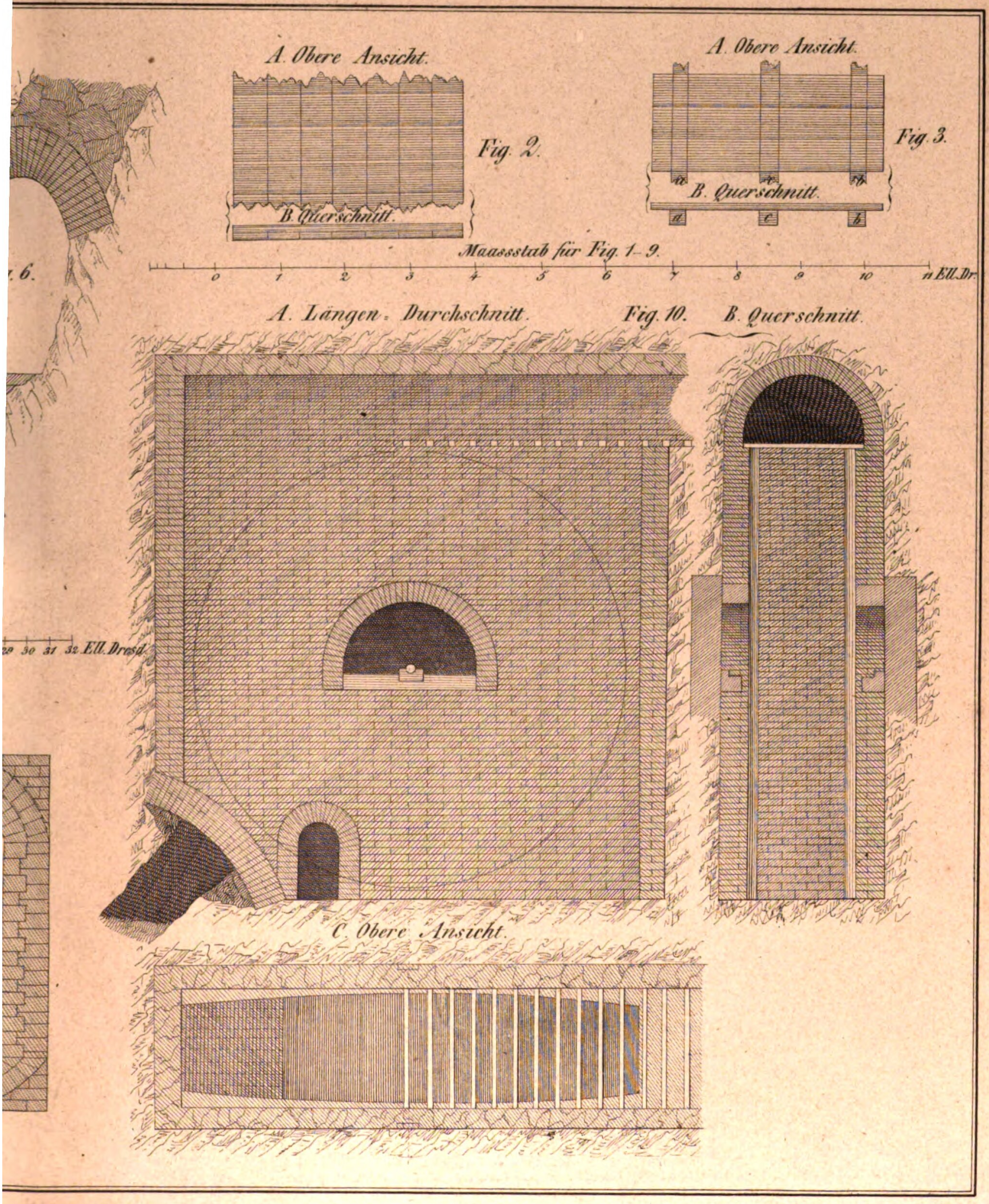
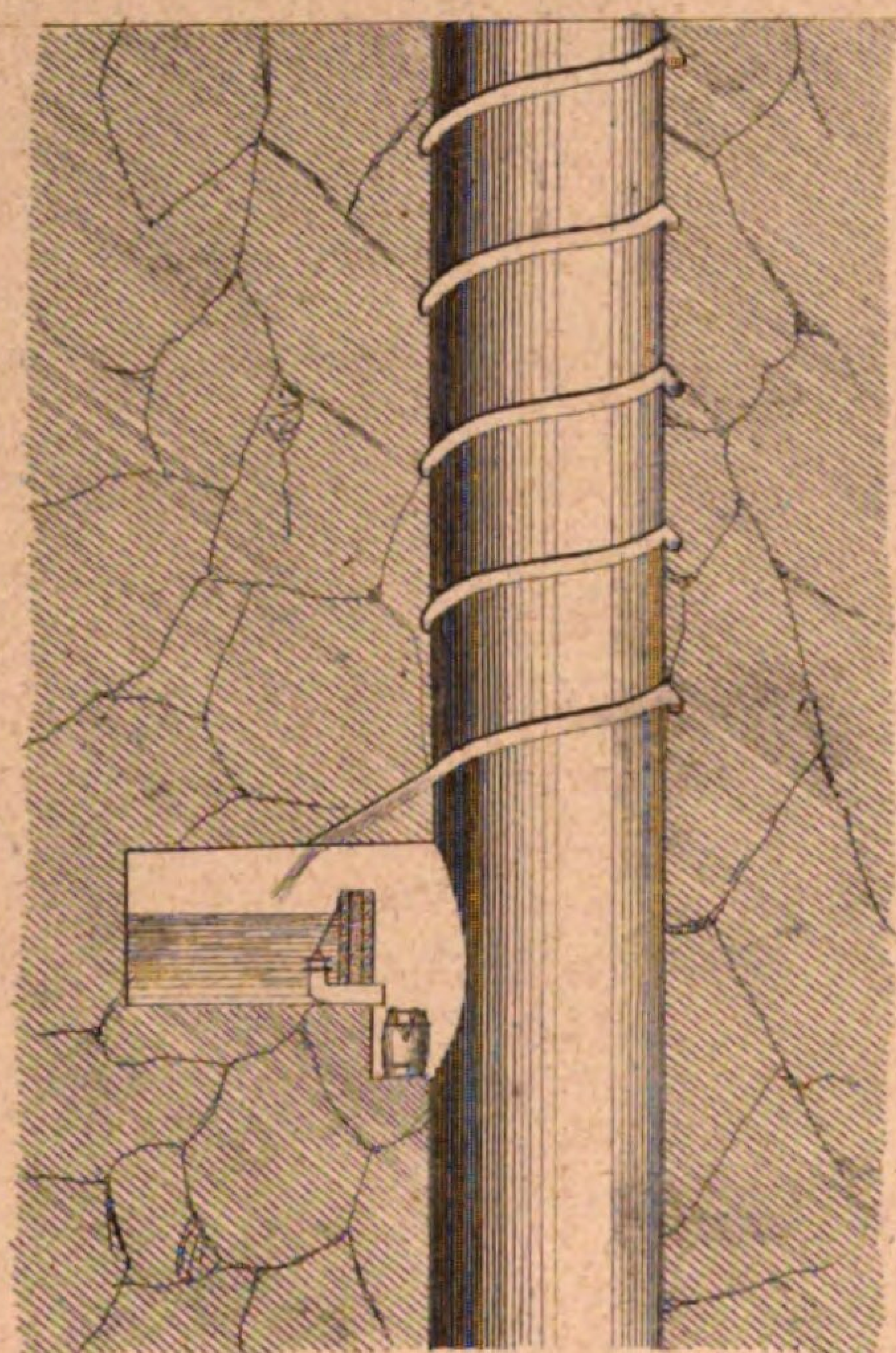

A. Obere Ansicht.
Fig. 2.
B. Querschnitt.
A. Obere Ansicht.
Fig. 3.
a
c
b
B. Querschnitt.
a
c
b
Maasstab für Fig. 1–9.
0 1 2 3 4 5 6 7 8 9 10 11 Ell. Dr.
6.
29 30 31 32 Ell. Dresd.
A. Längen-Durchschnitt.
Fig. 10.
B. Querschnitt.
C. Obere Ansicht.

Fig. 1.



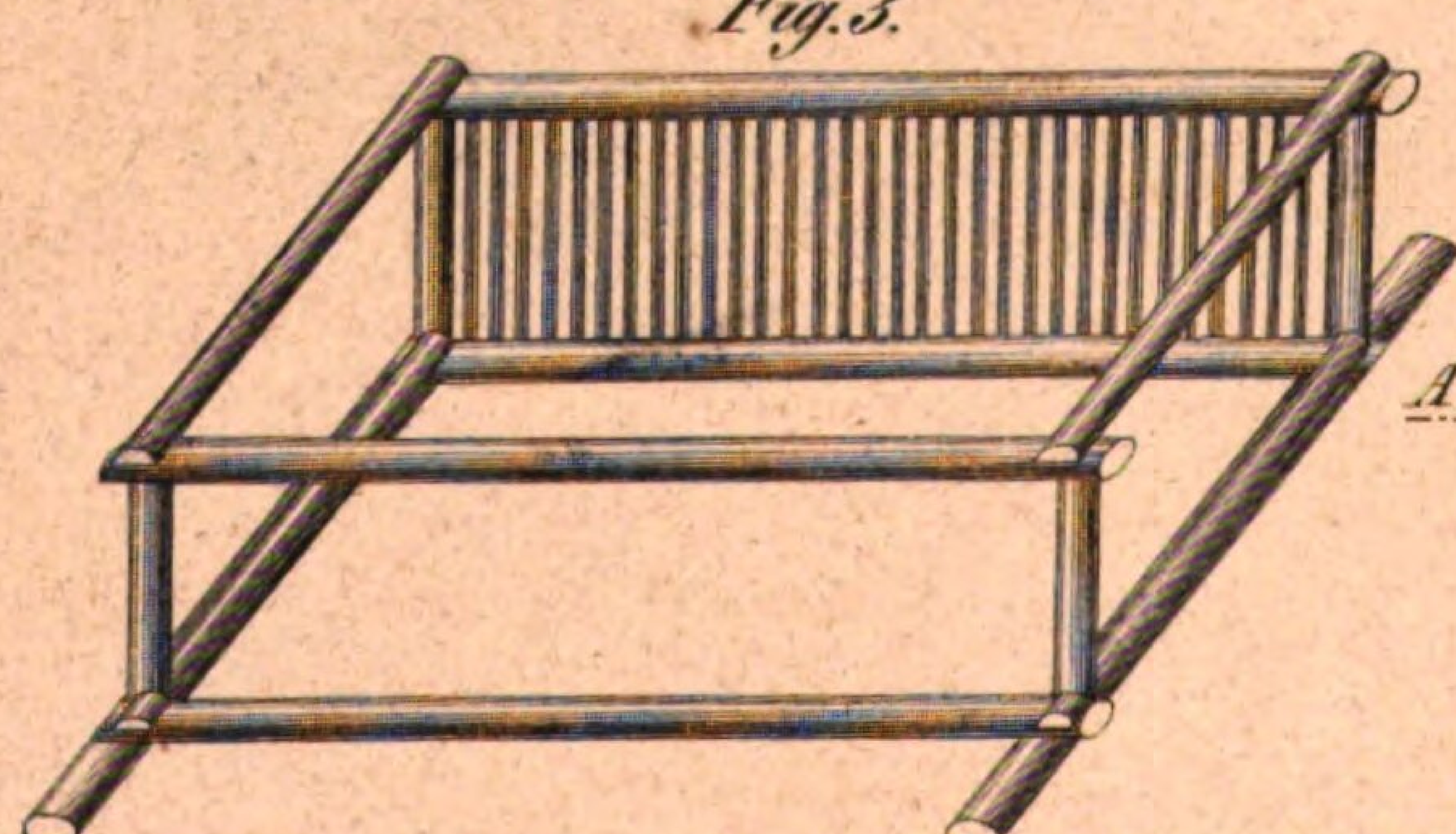
Maassstab für Fig. 1.



Fig. 2.

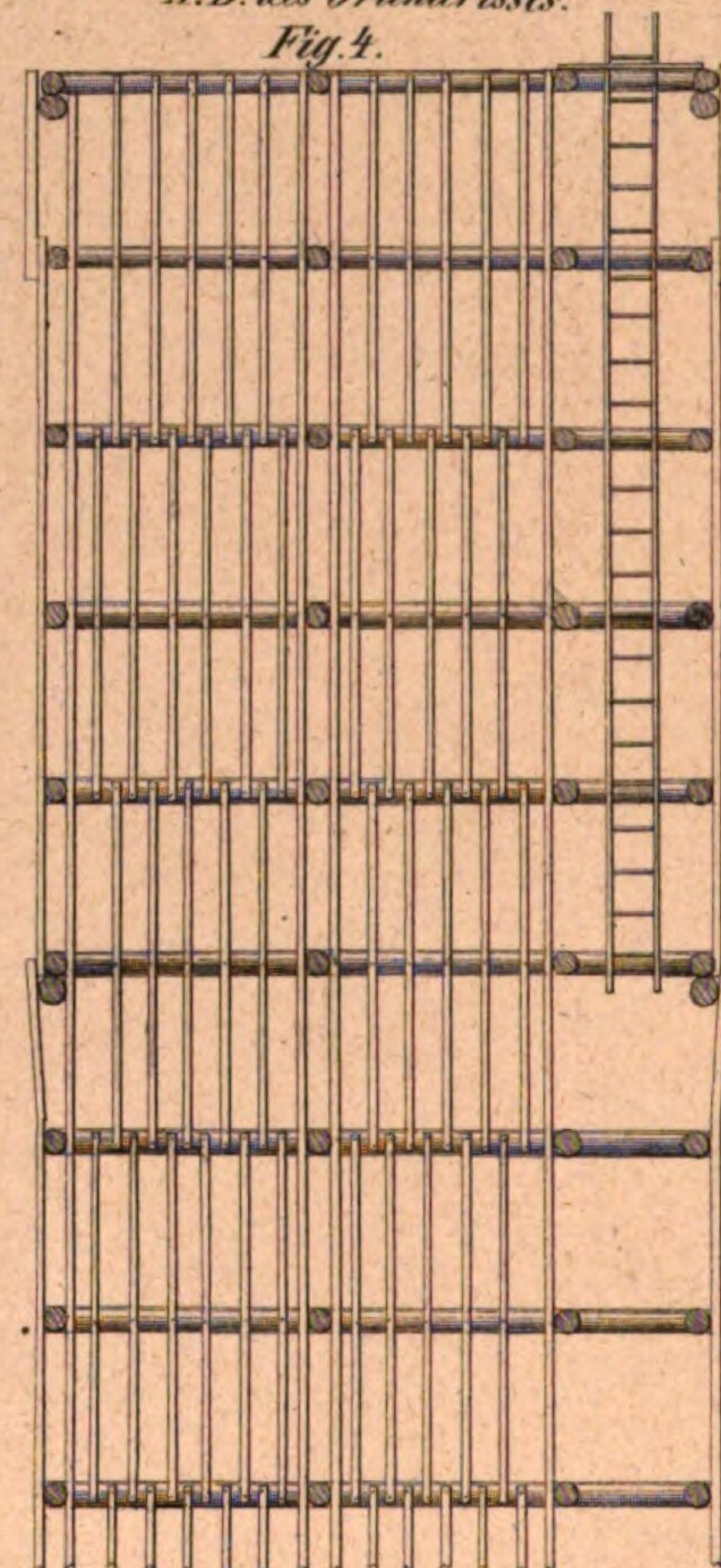


Fig. 3.



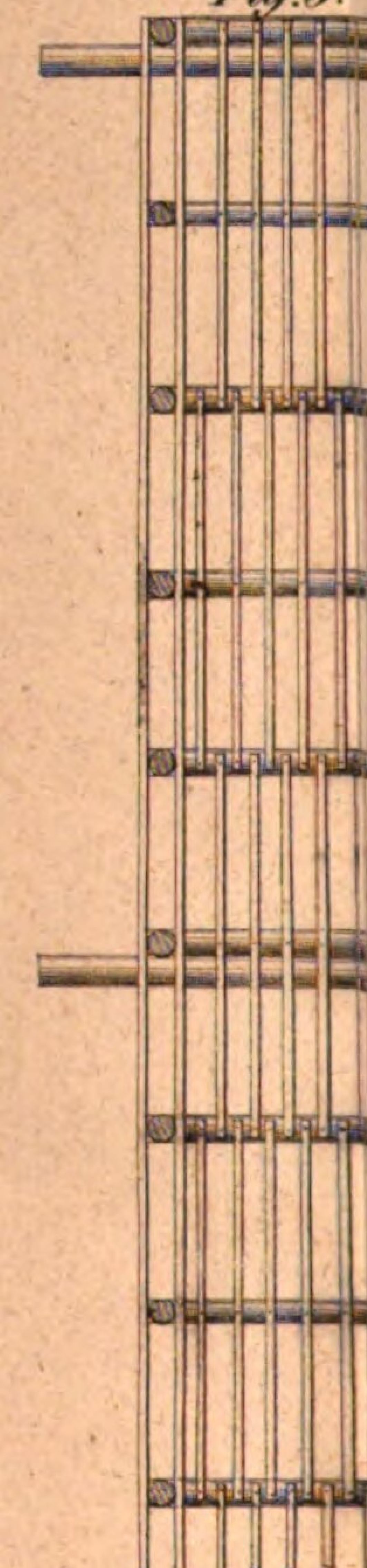
Durchschnitt nach der Linie A.B. des Grundrisses.

Fig. 4.



Durchschnitt nach der Li... des Grundrisses.

Fig. 5.



Grundriss.

Fig. 6.

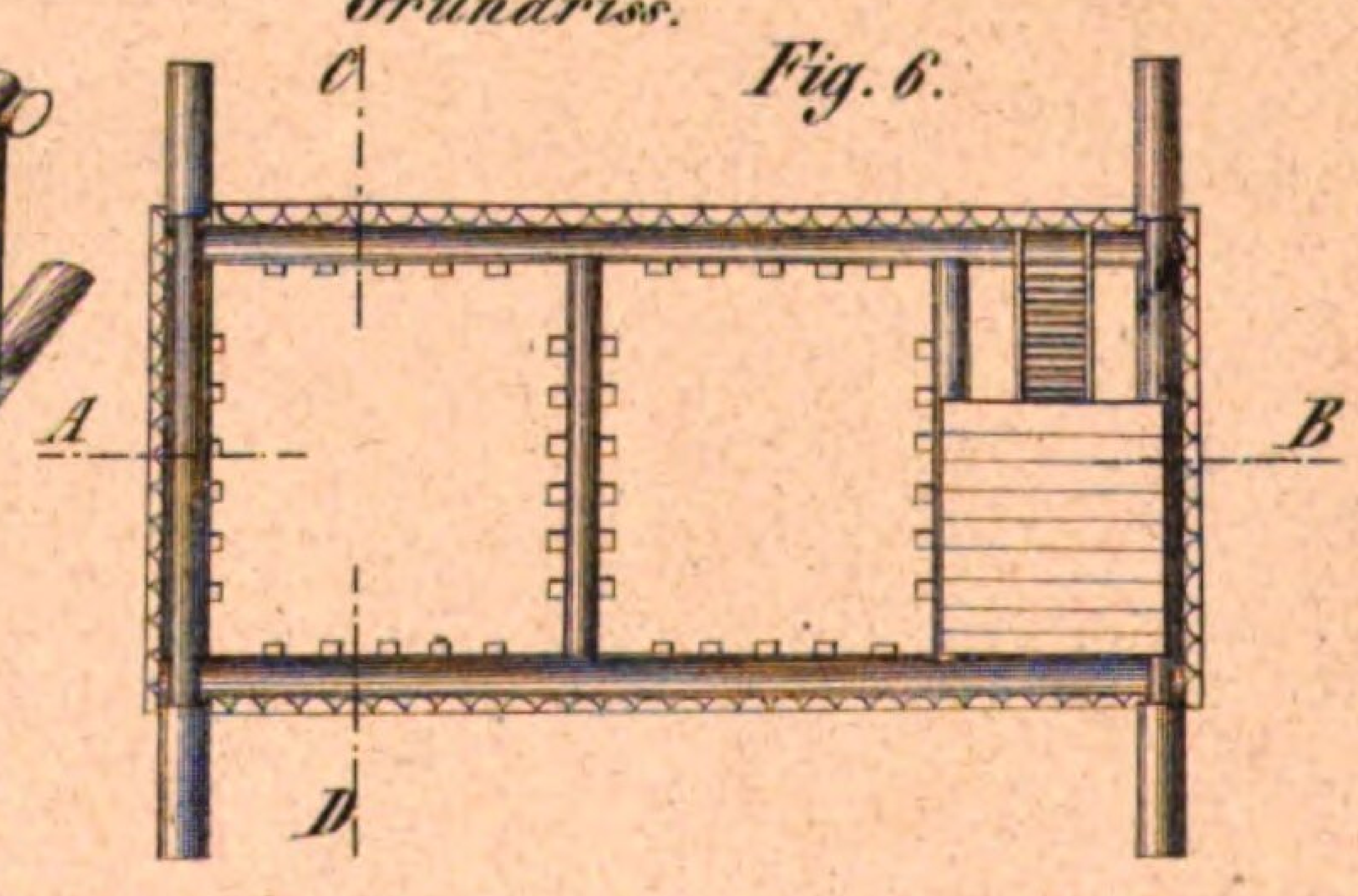
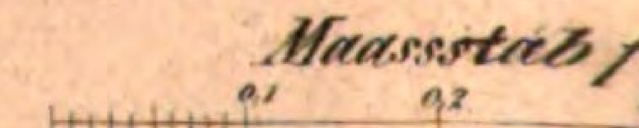


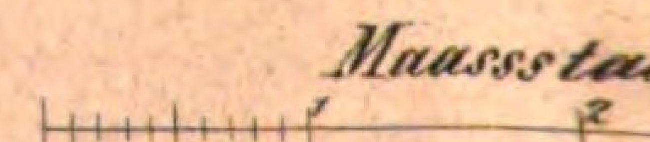
Fig. 8.



Maassstab f...



Maassstab...



ter Linie C.D.
isses.

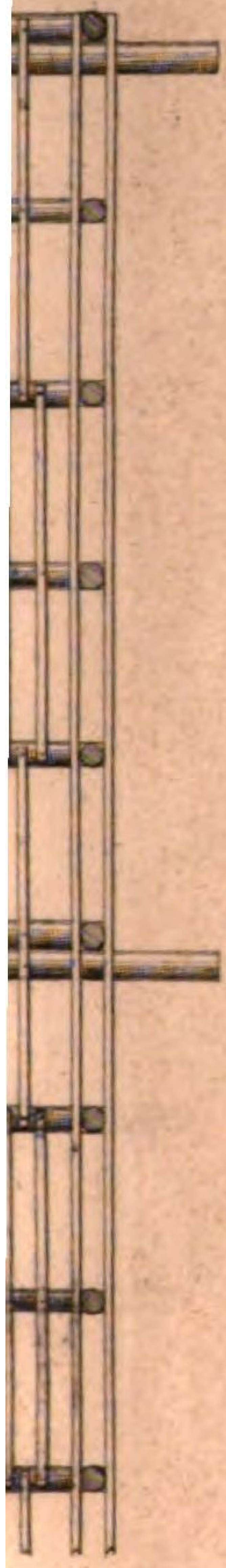


Fig. 10.

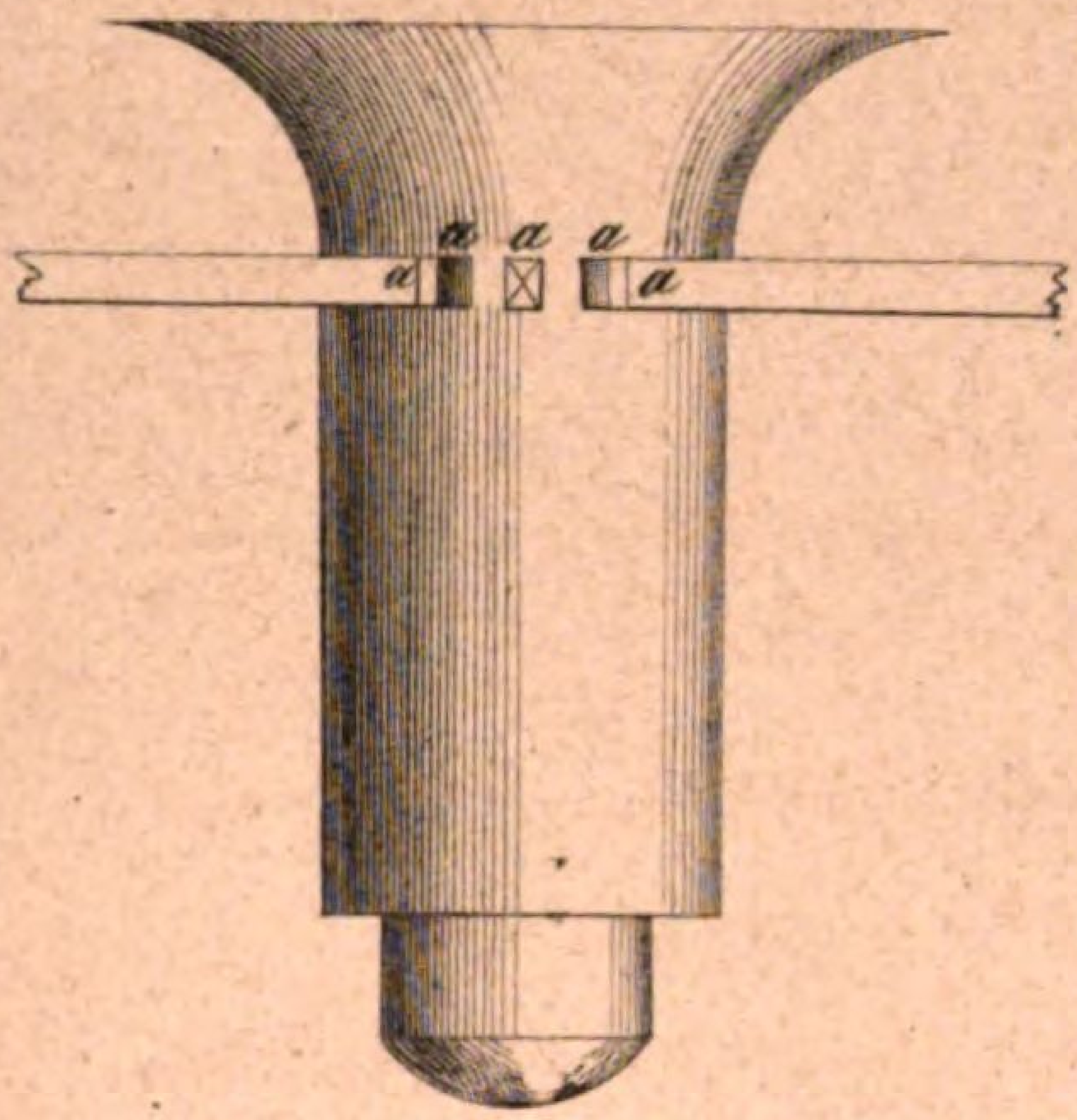


Fig. 11.

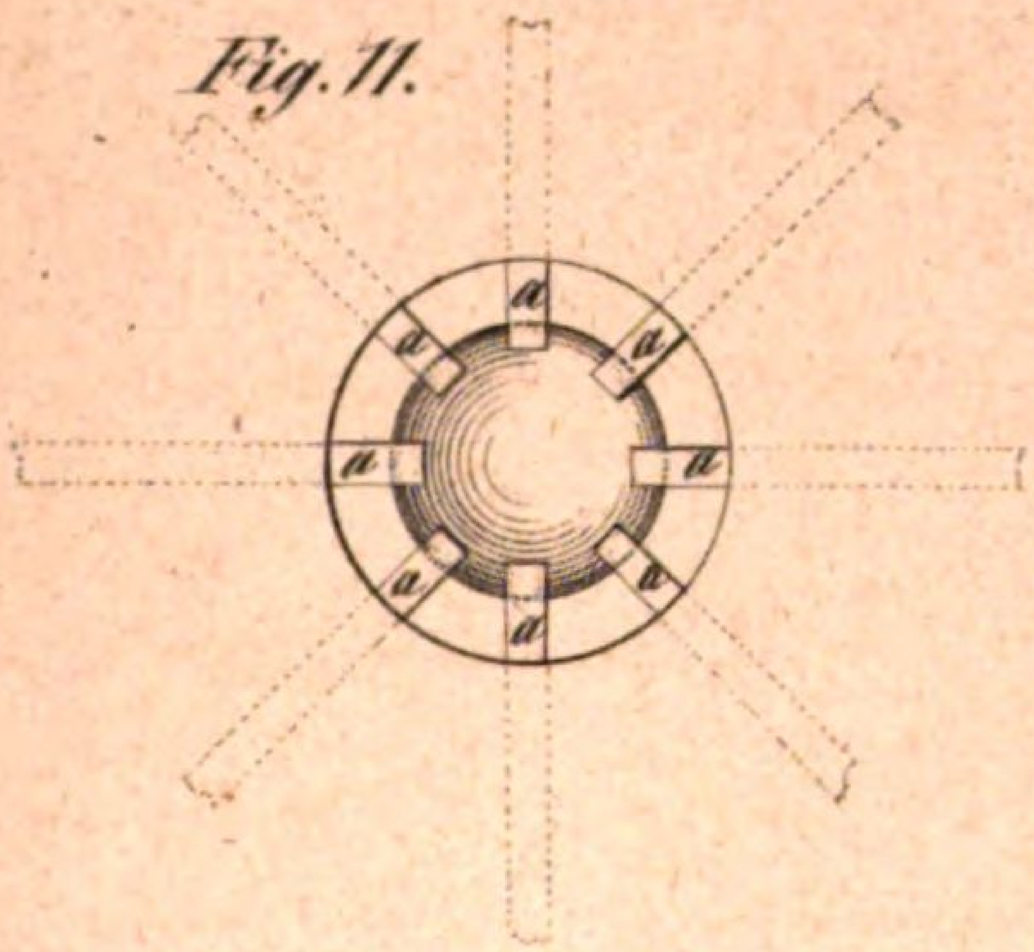
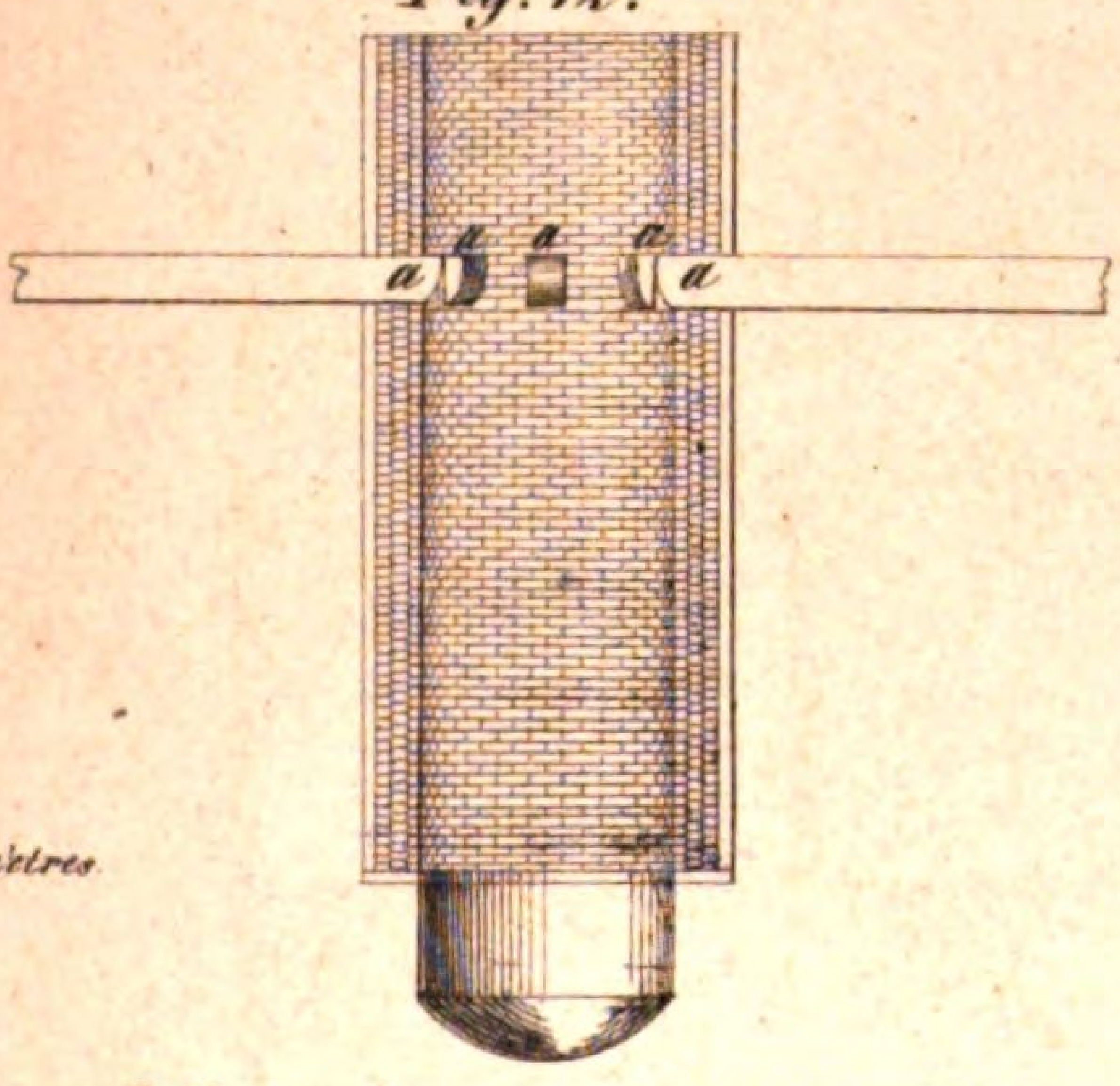


Fig. 12.



ig. 9.



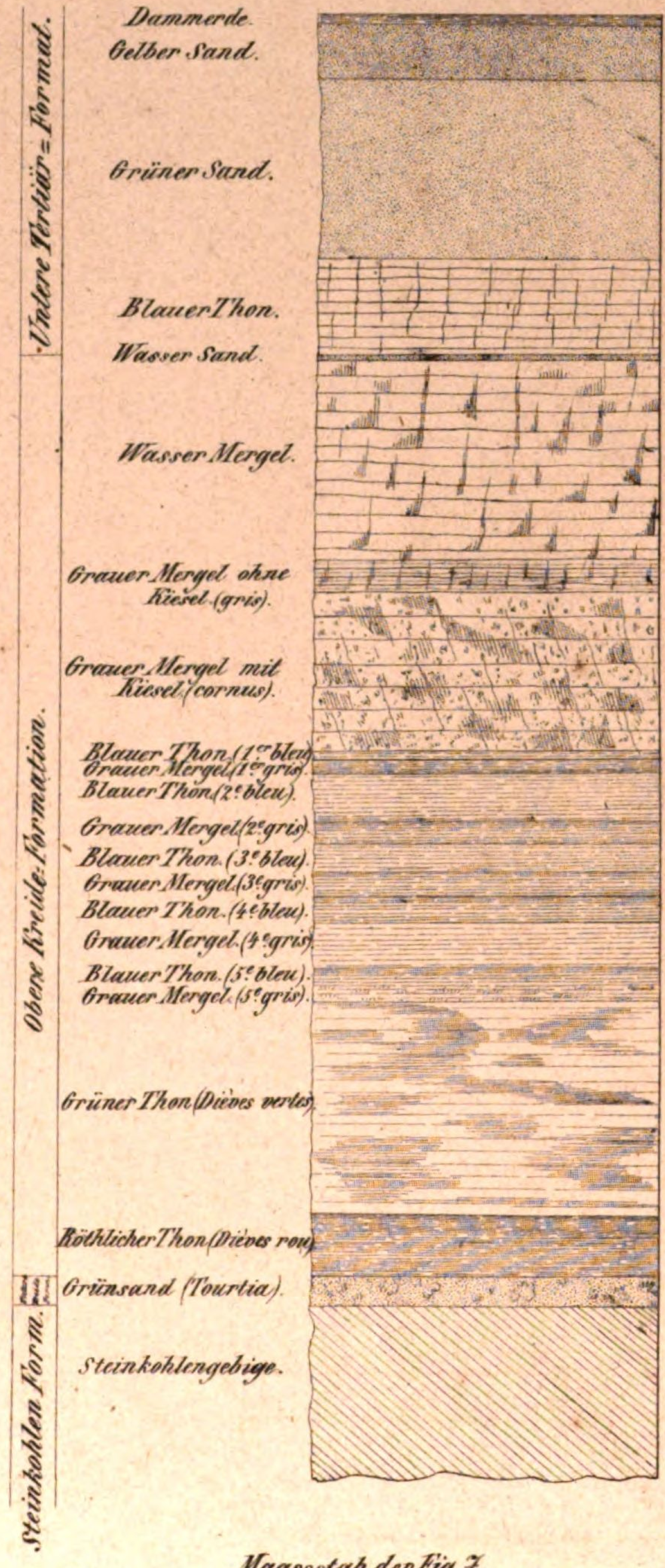
die Fig. 8 u. 9.

0,4 0m 5 décimètres

für die Fig. 2 bis 6.

3 4 5 mètres.

Fig. 7.

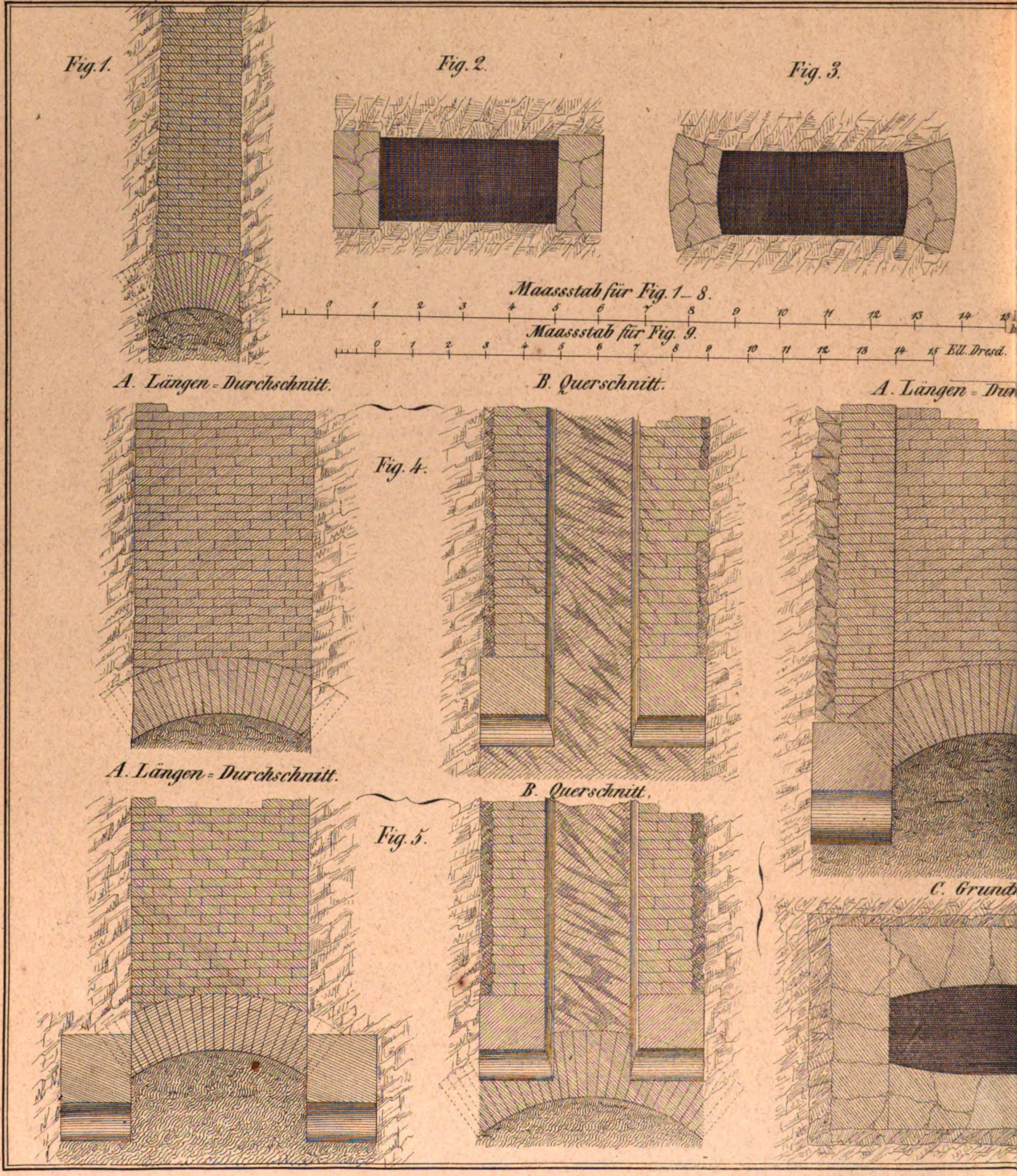


Maassstab der Fig. 7.

10 20 30 40 mètres.

Maassstab für die Fig. 10 bis 12.

1 2 3 4 5 6 7 8 9 10 mètres.


Fig. 1.
Fig. 2.
Fig. 3.
Maassstab für Fig. 1 – 8.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
Maassstab für Fig. 9.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 Ell. Dresd.
A. Längen = Durchschnitt.
B. Querschnitt.
A. Längen = Dur
Fig. 4.
A. Längen = Durchschnitt.
B. Querschnitt.
Fig. 5.
C. Grundr

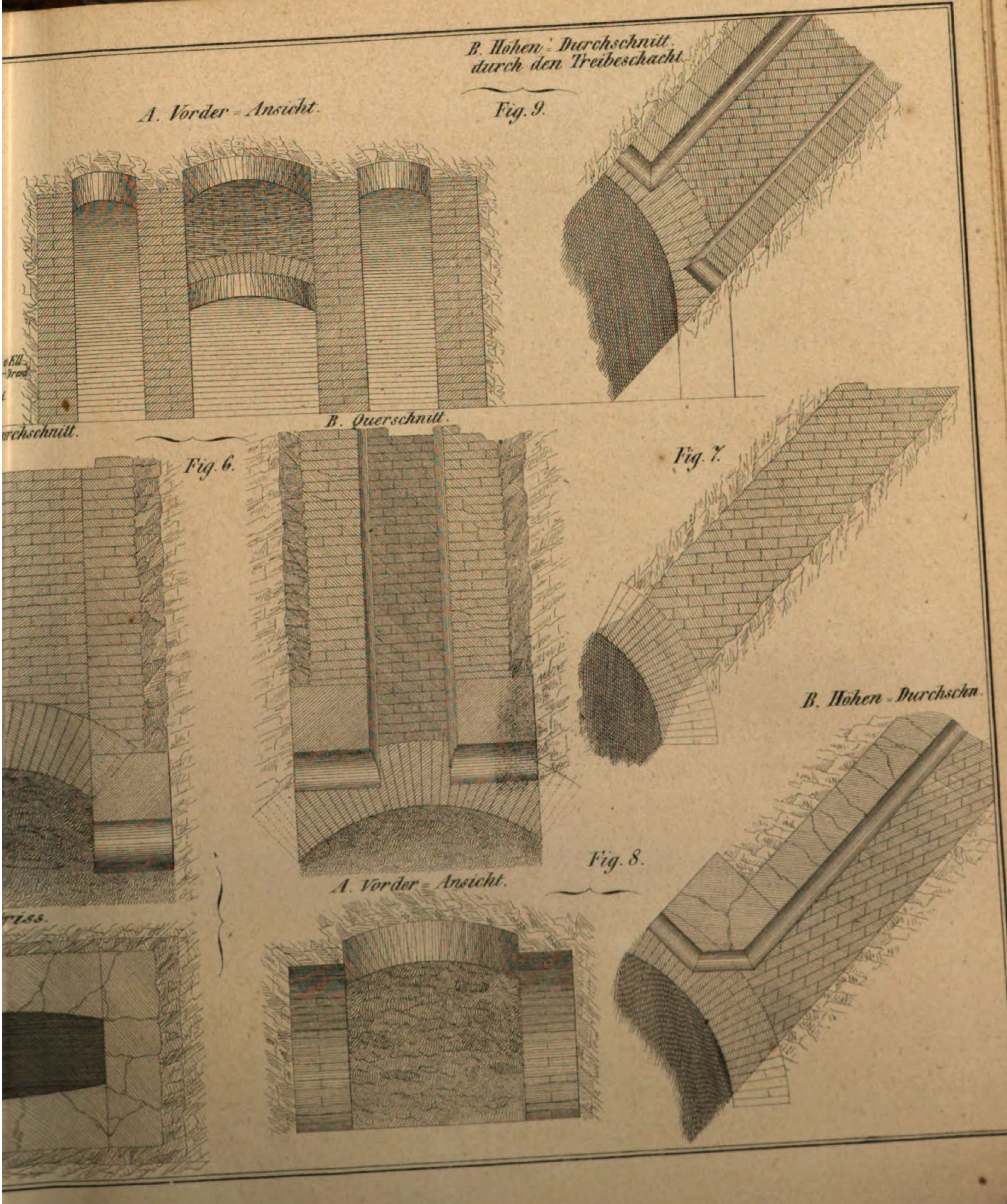
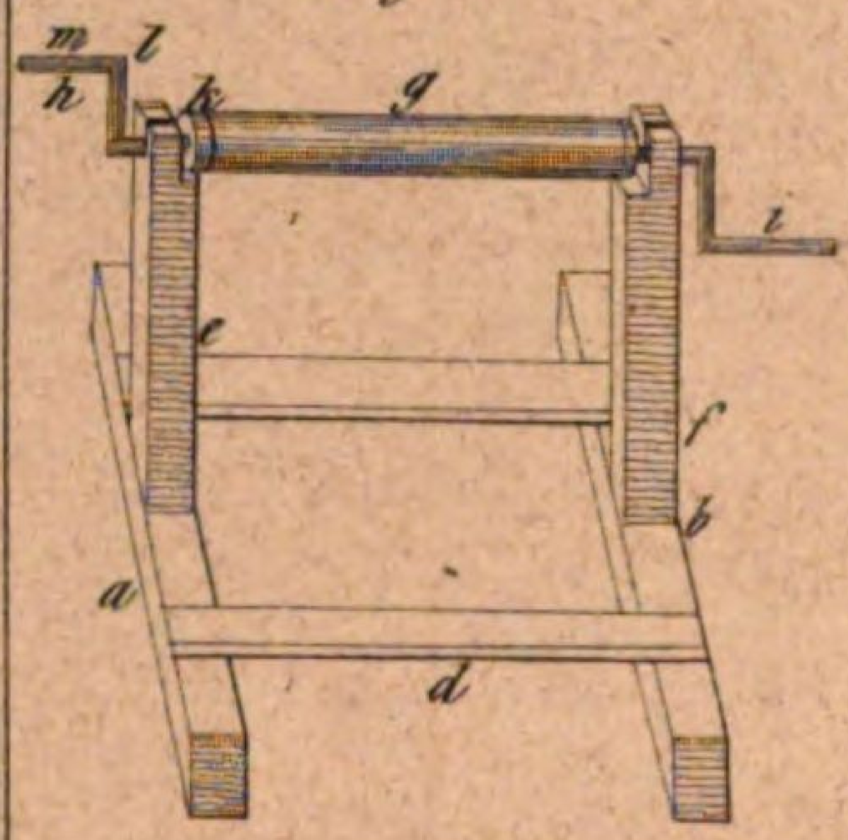

B. Höhen-Durchschnitt durch den Treibeschacht.
Fig. 9.
A. Vorder-Ansicht.
Fig. 6.
B. Querschnitt.
Fig. 7.
B. Höhen-Durchschn.
Fig. 8.
A. Vorder-Ansicht.

Fig. 1.



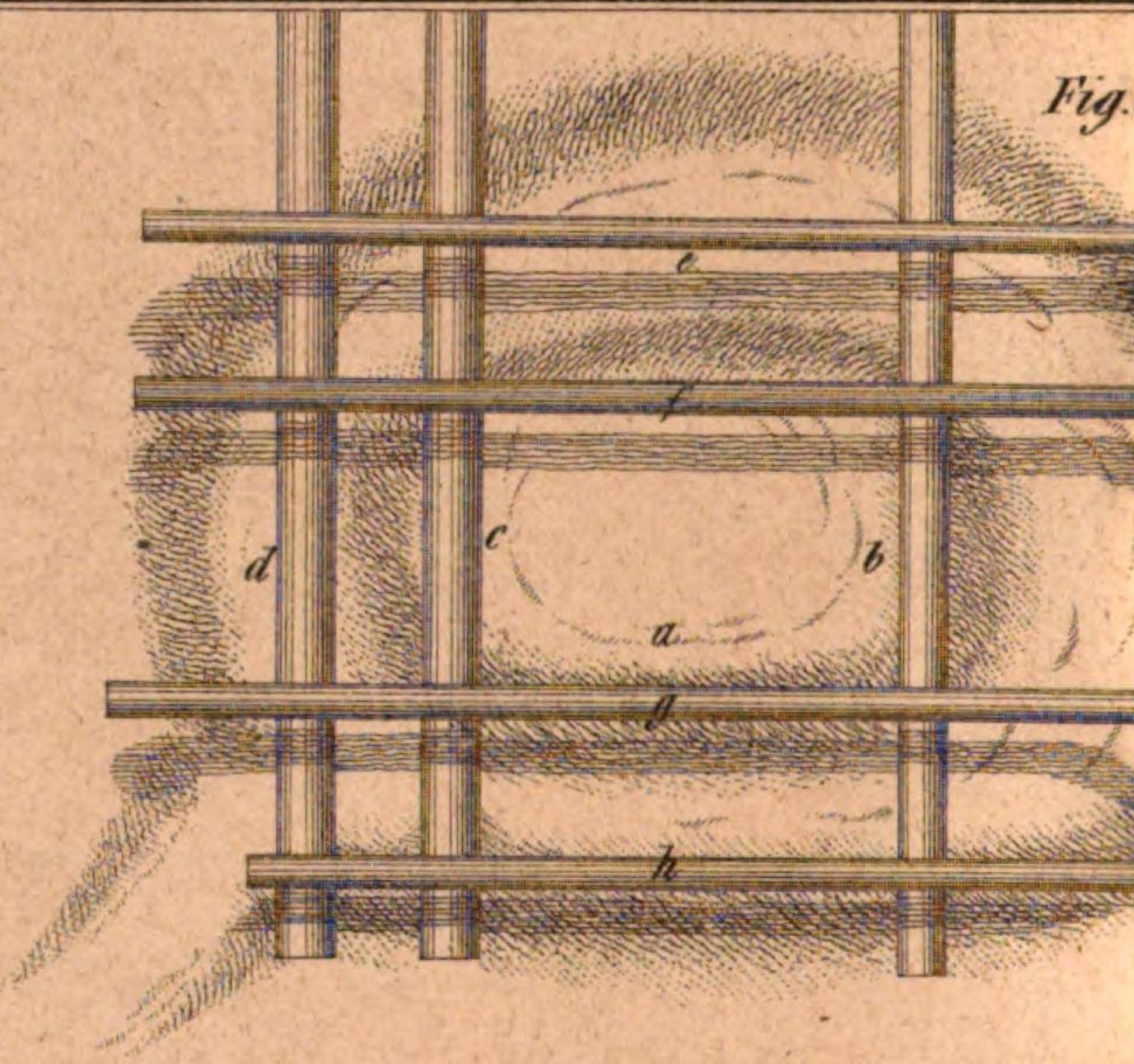


Fig.

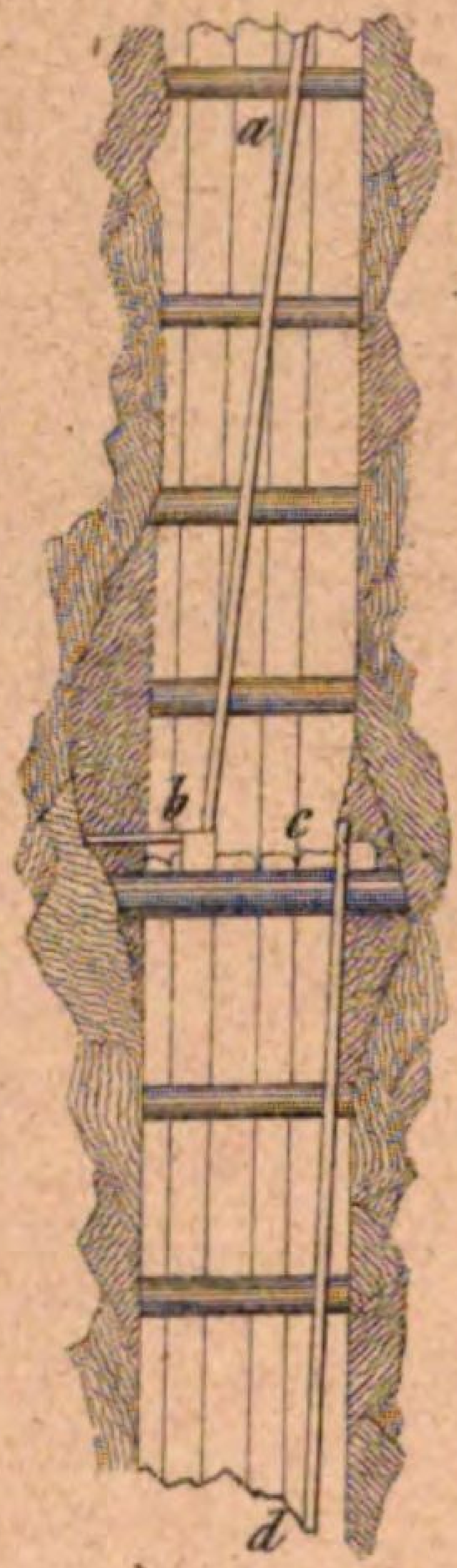
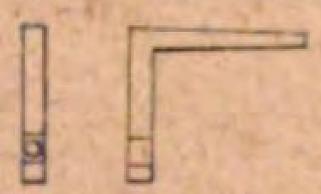


Fig. 4.

Fig. 2.



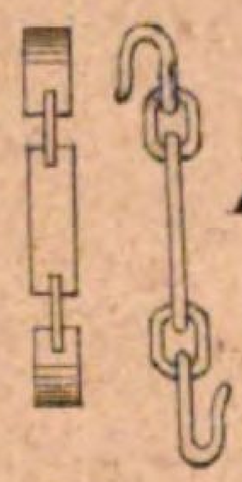


Fig. 3.

Fig. 11.

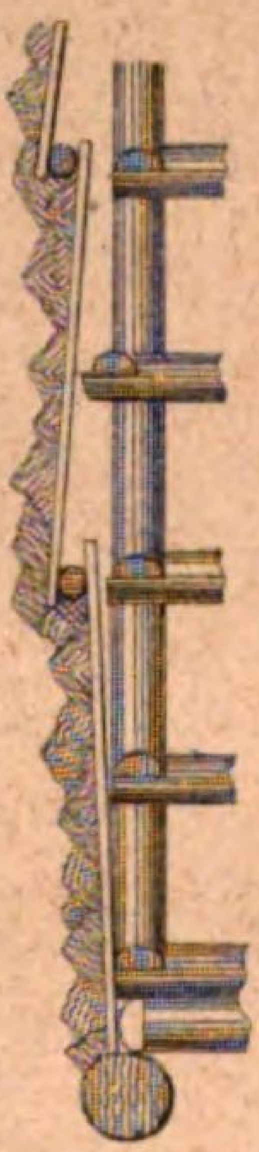
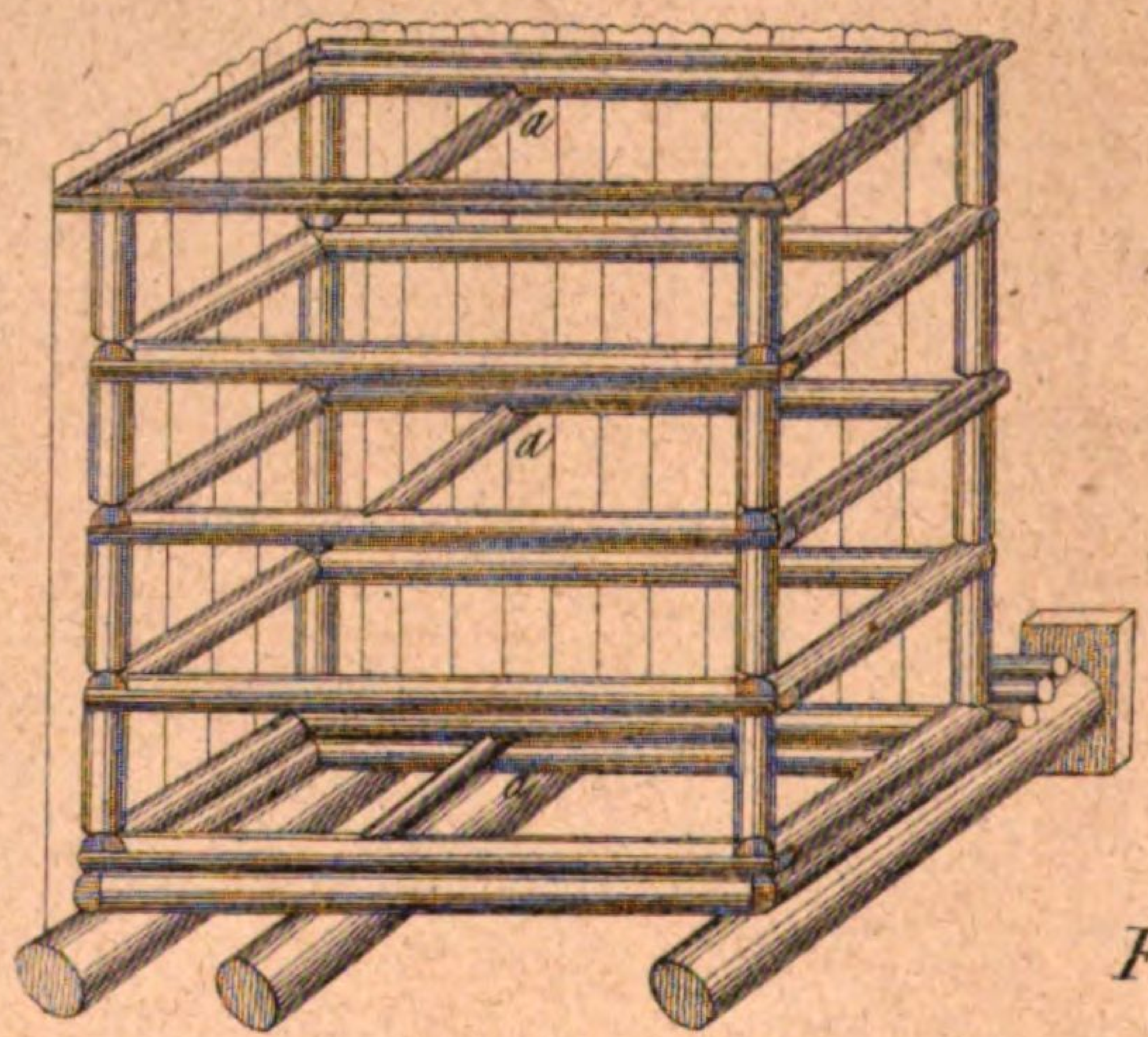


Fig. 10.



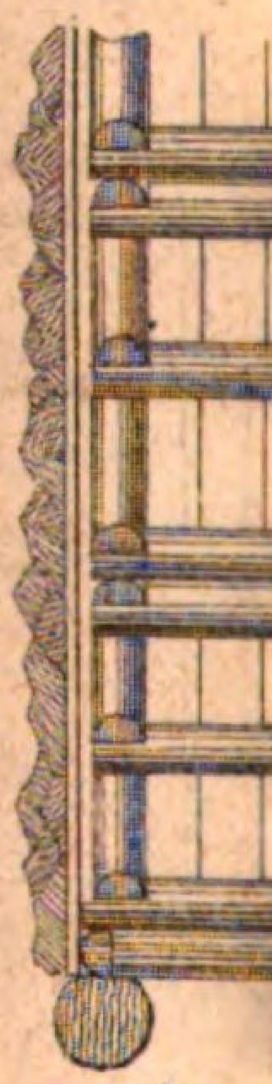


Fig. 15.

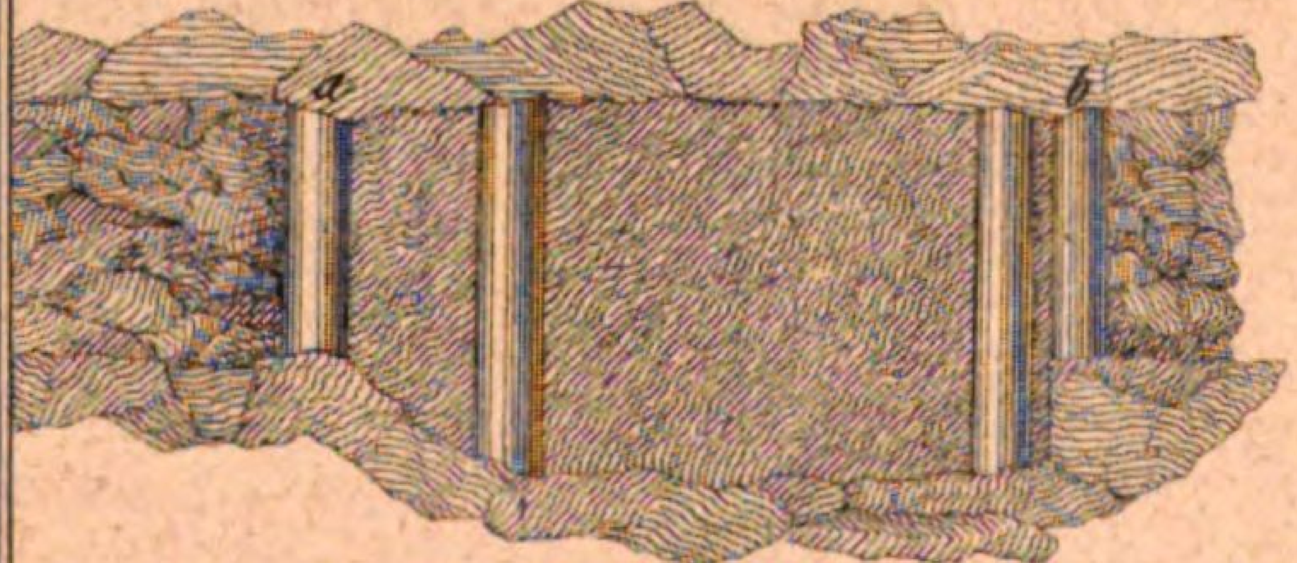
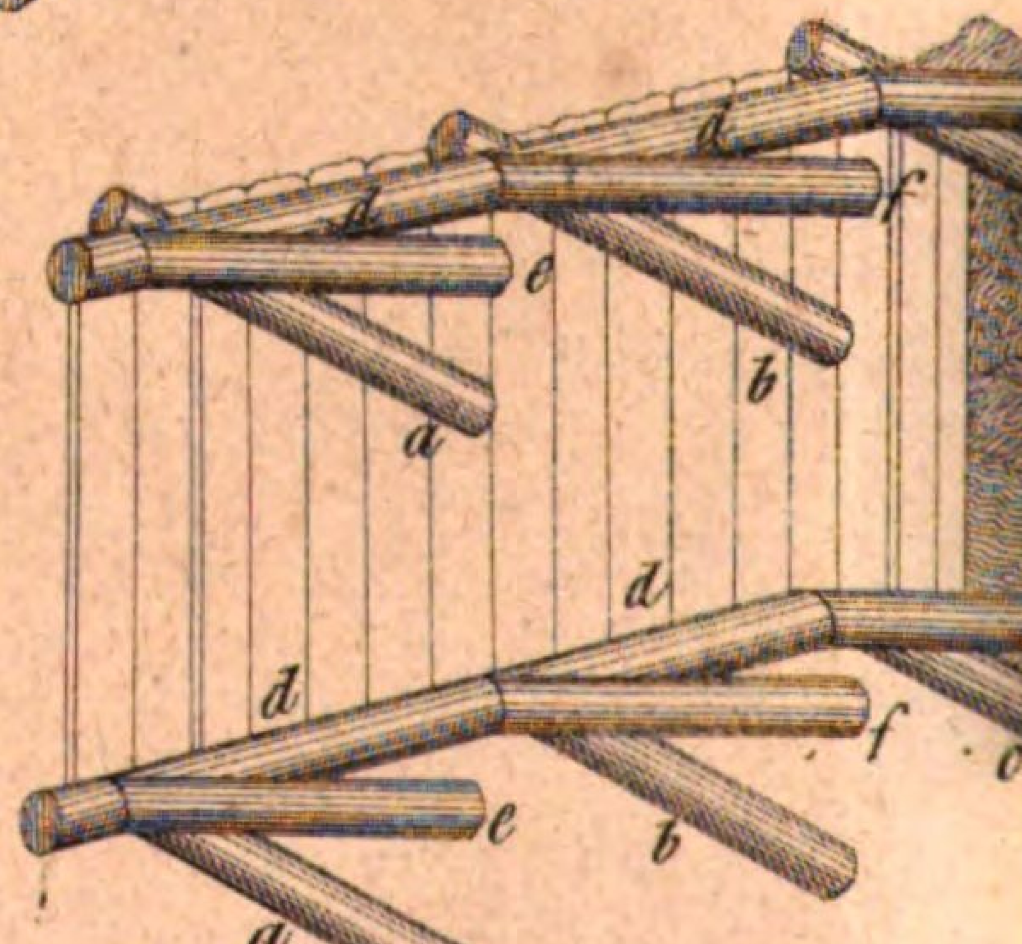


Fig. 16.

Fig. 17.





5.

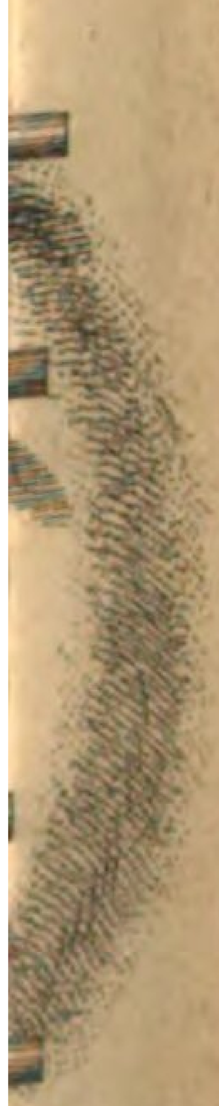


Fig. 6.

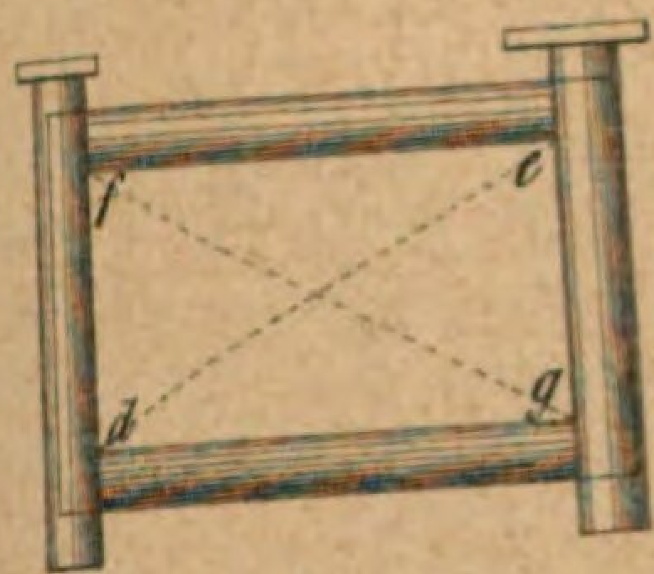


Fig. 7.



Fig. 8.

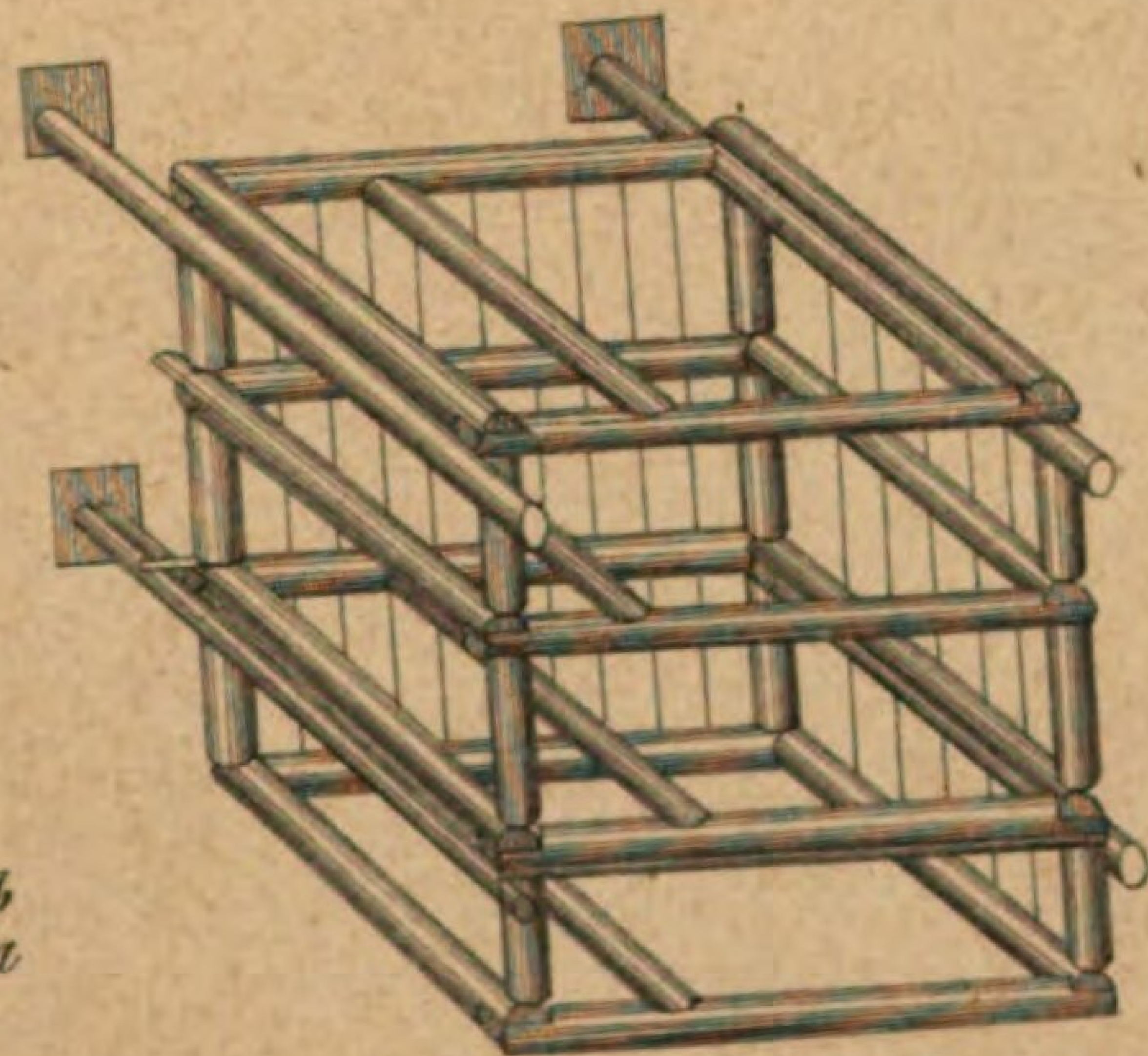


Fig. 9.

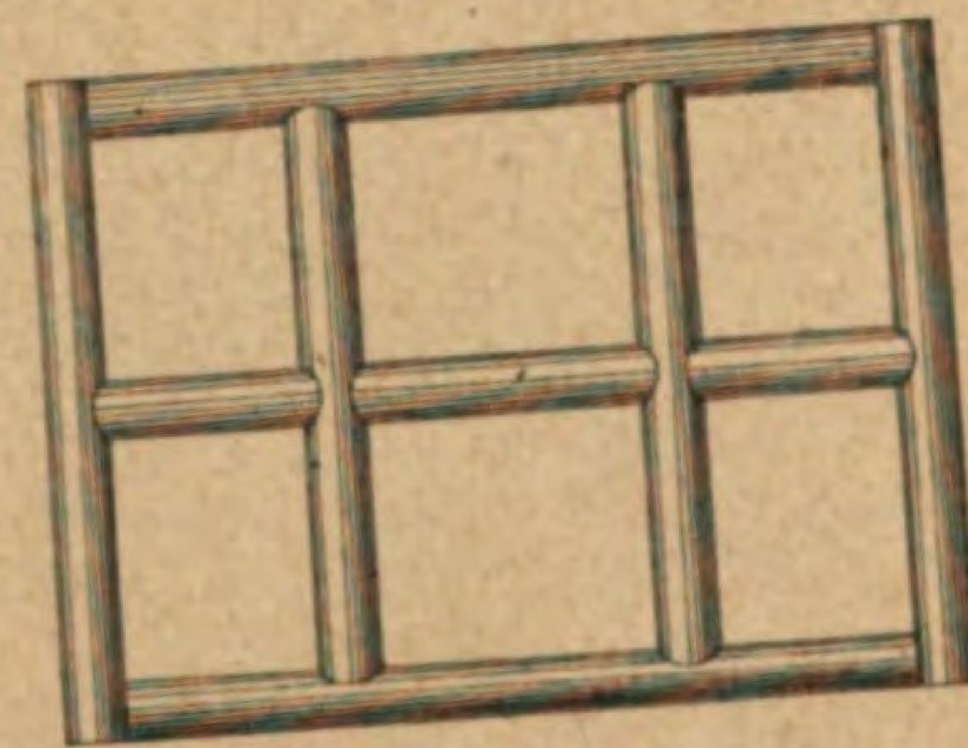


Fig. 12.

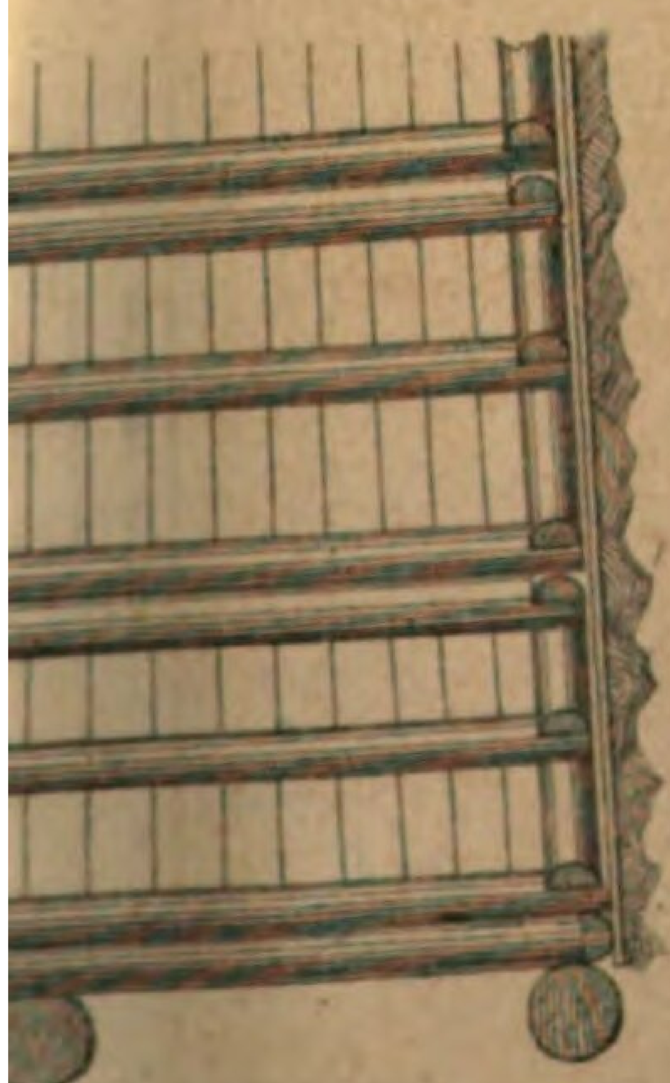


Fig. 13.

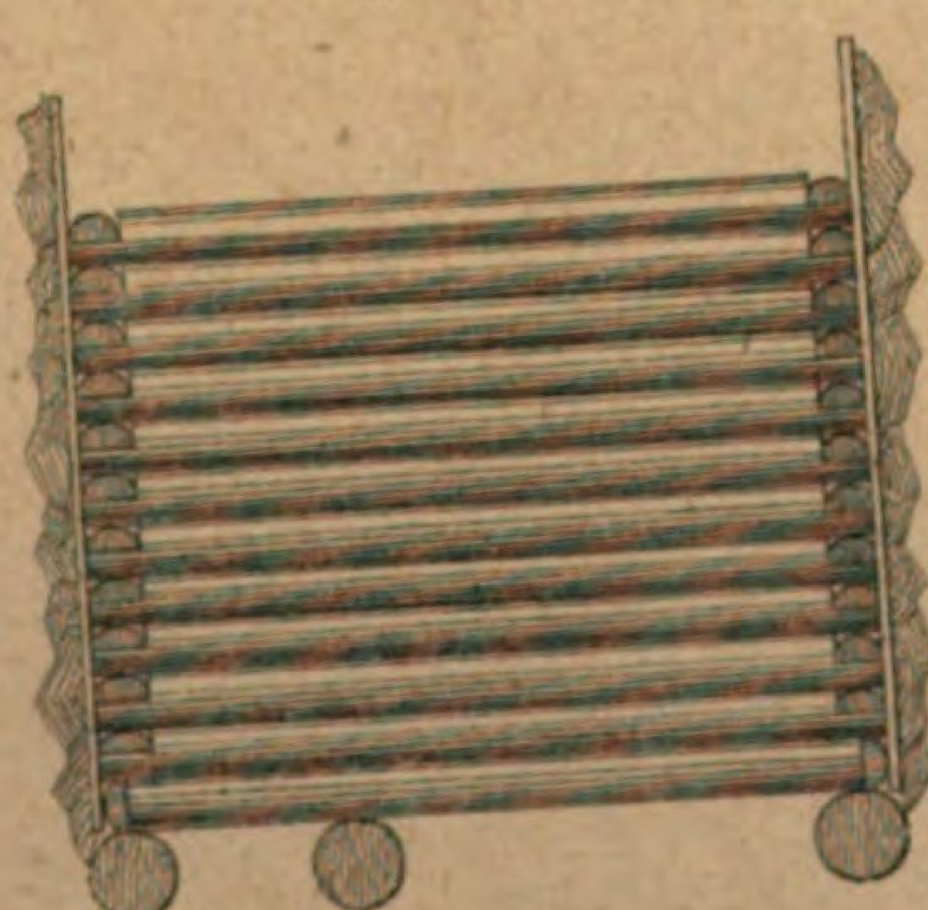


Fig. 14.

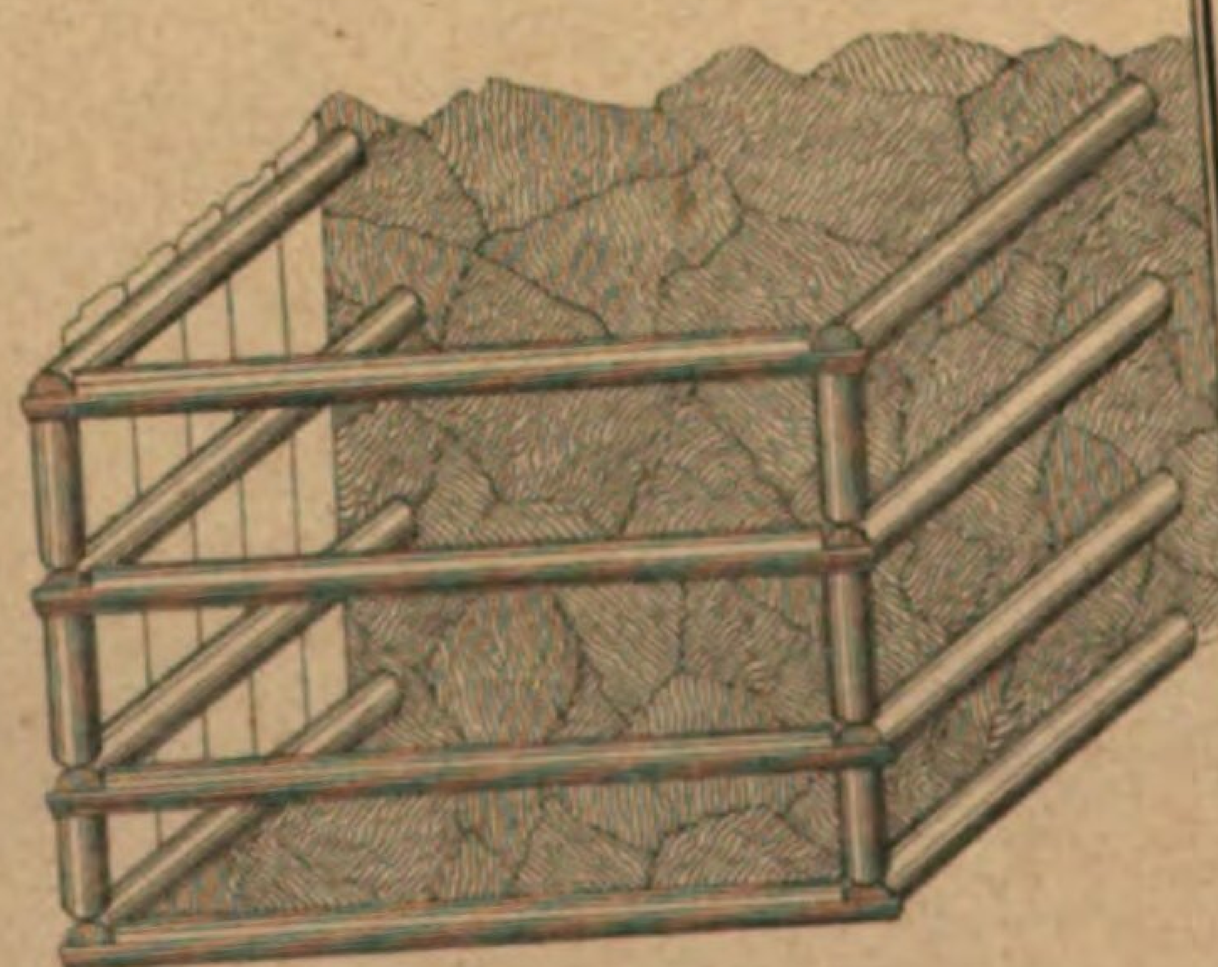




Fig. 18.

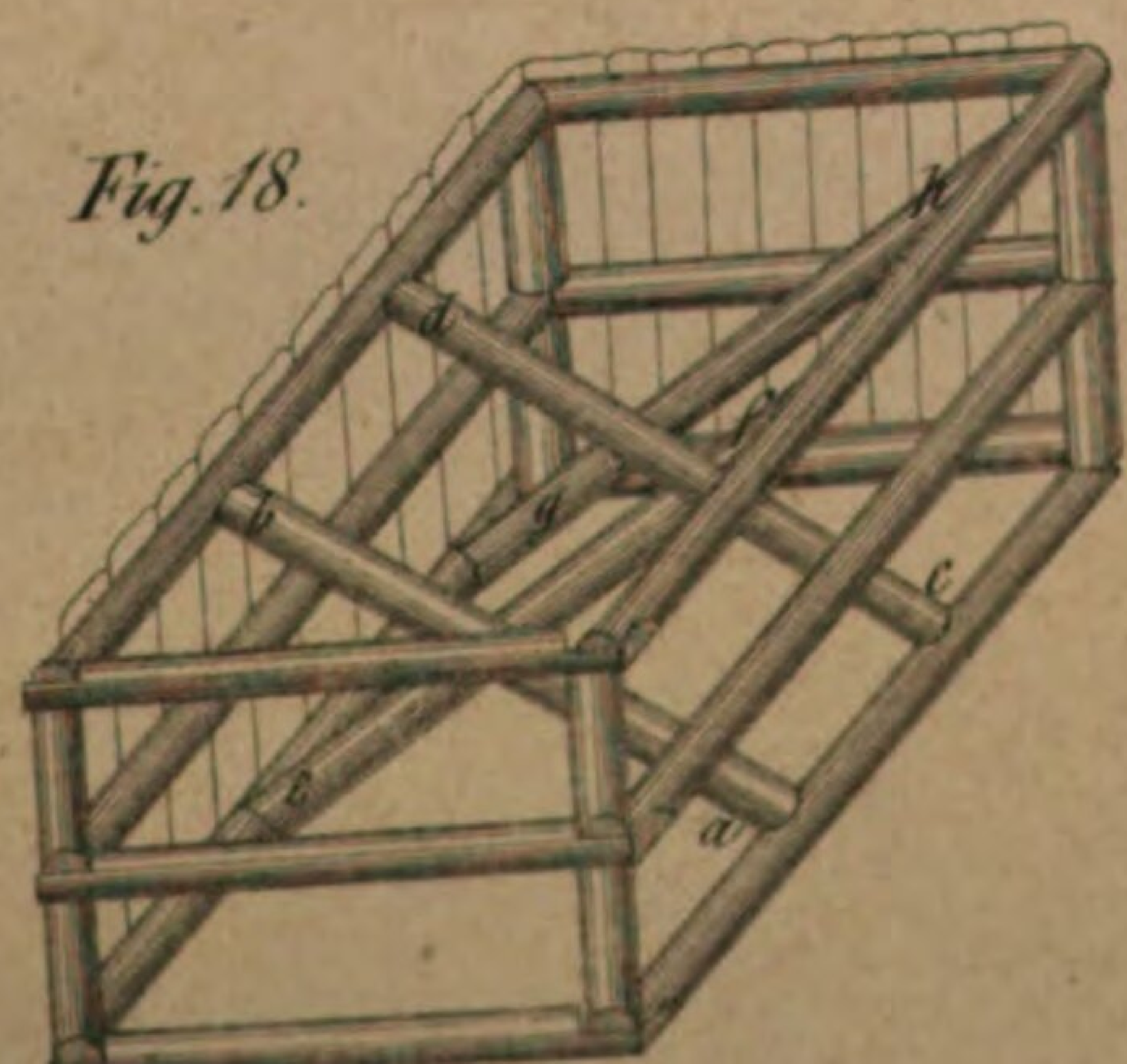
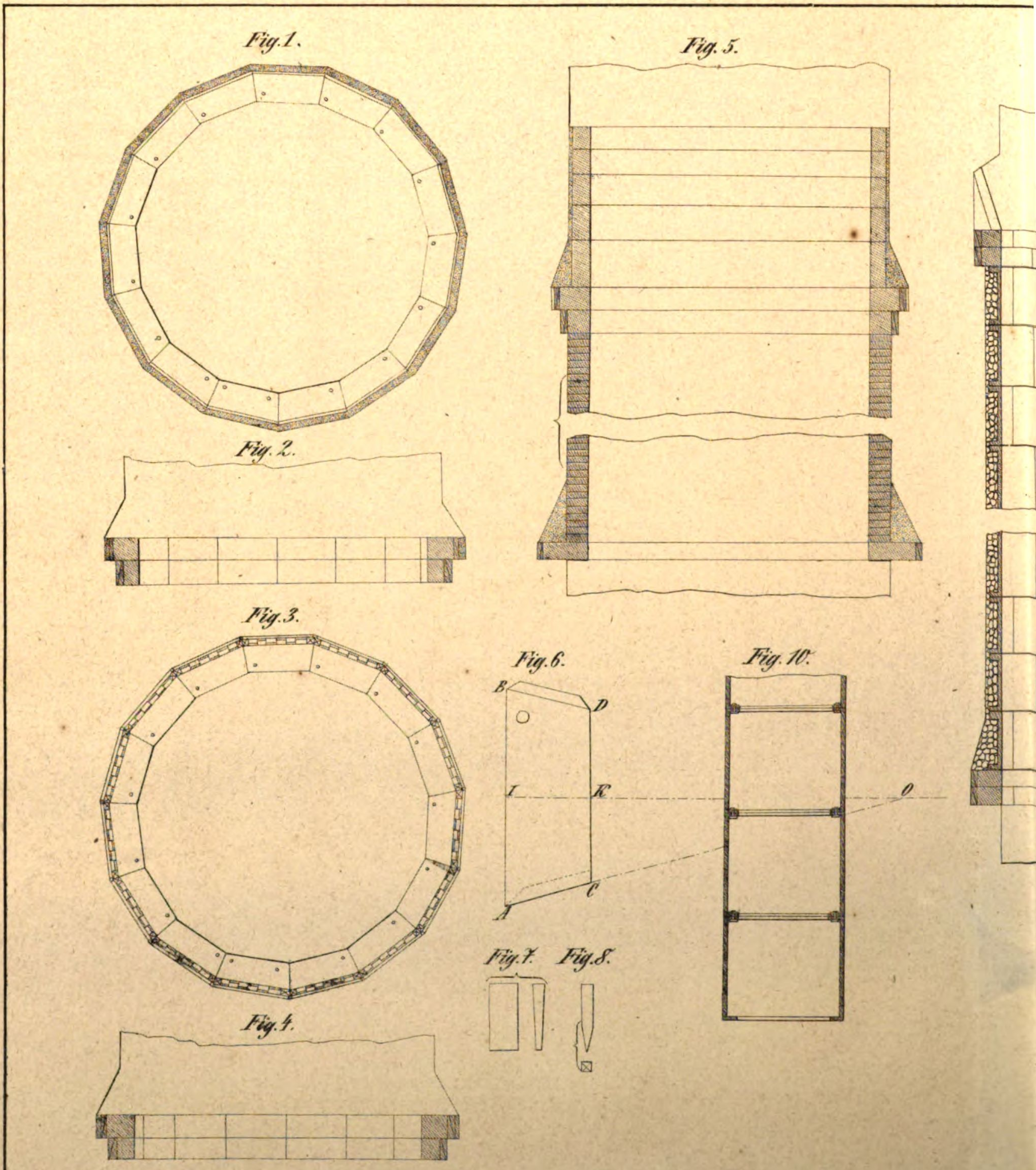
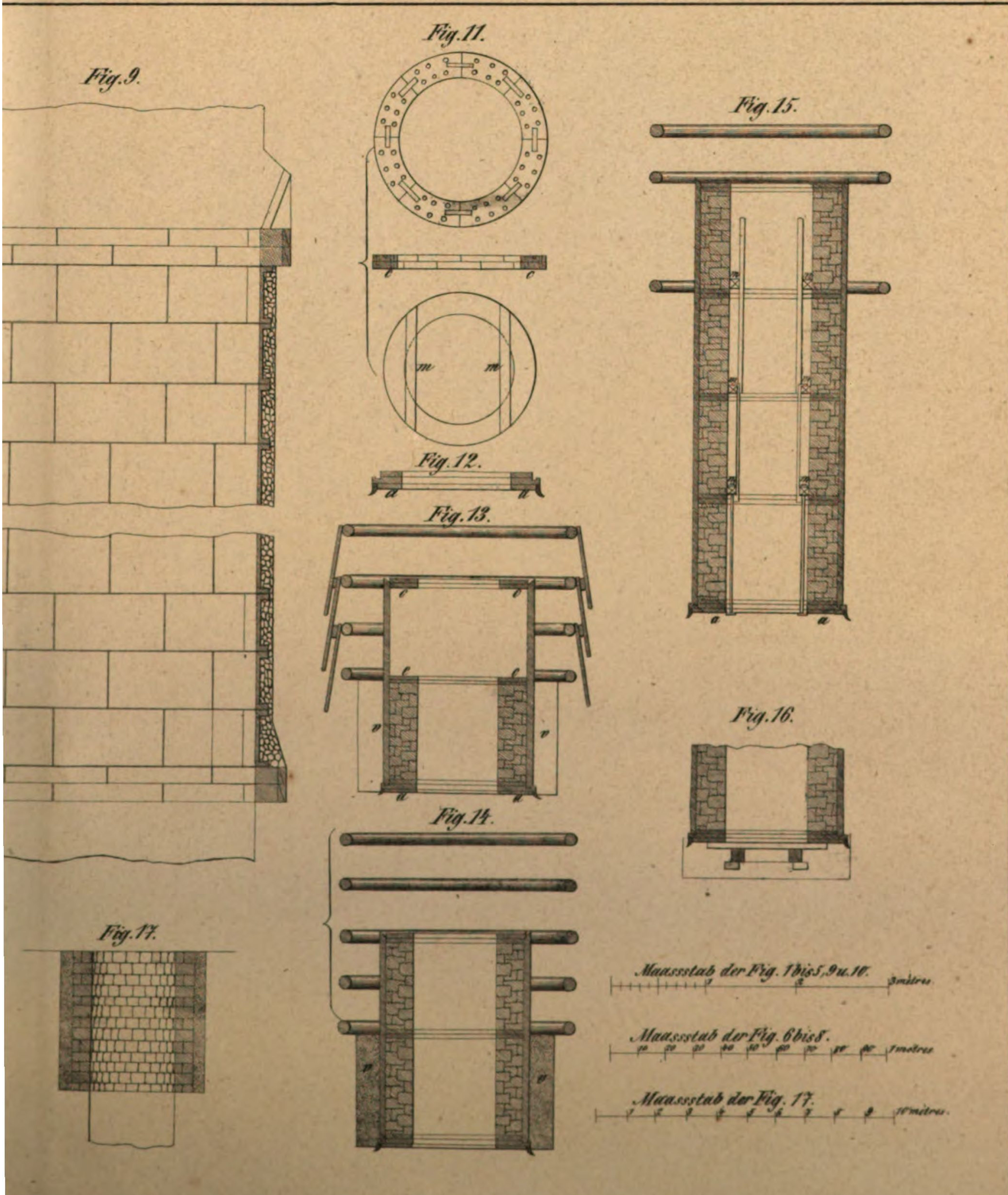


Fig. 19.

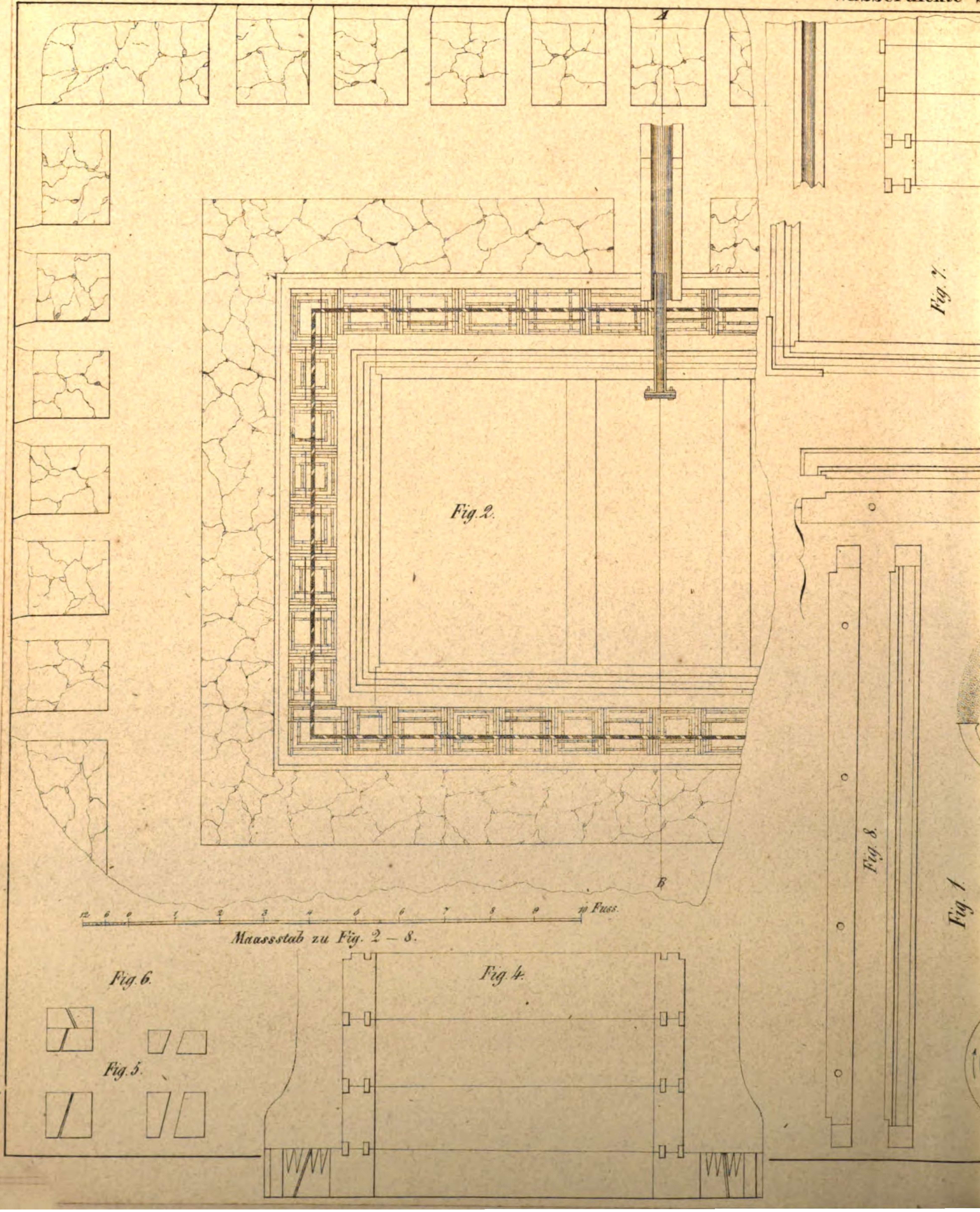


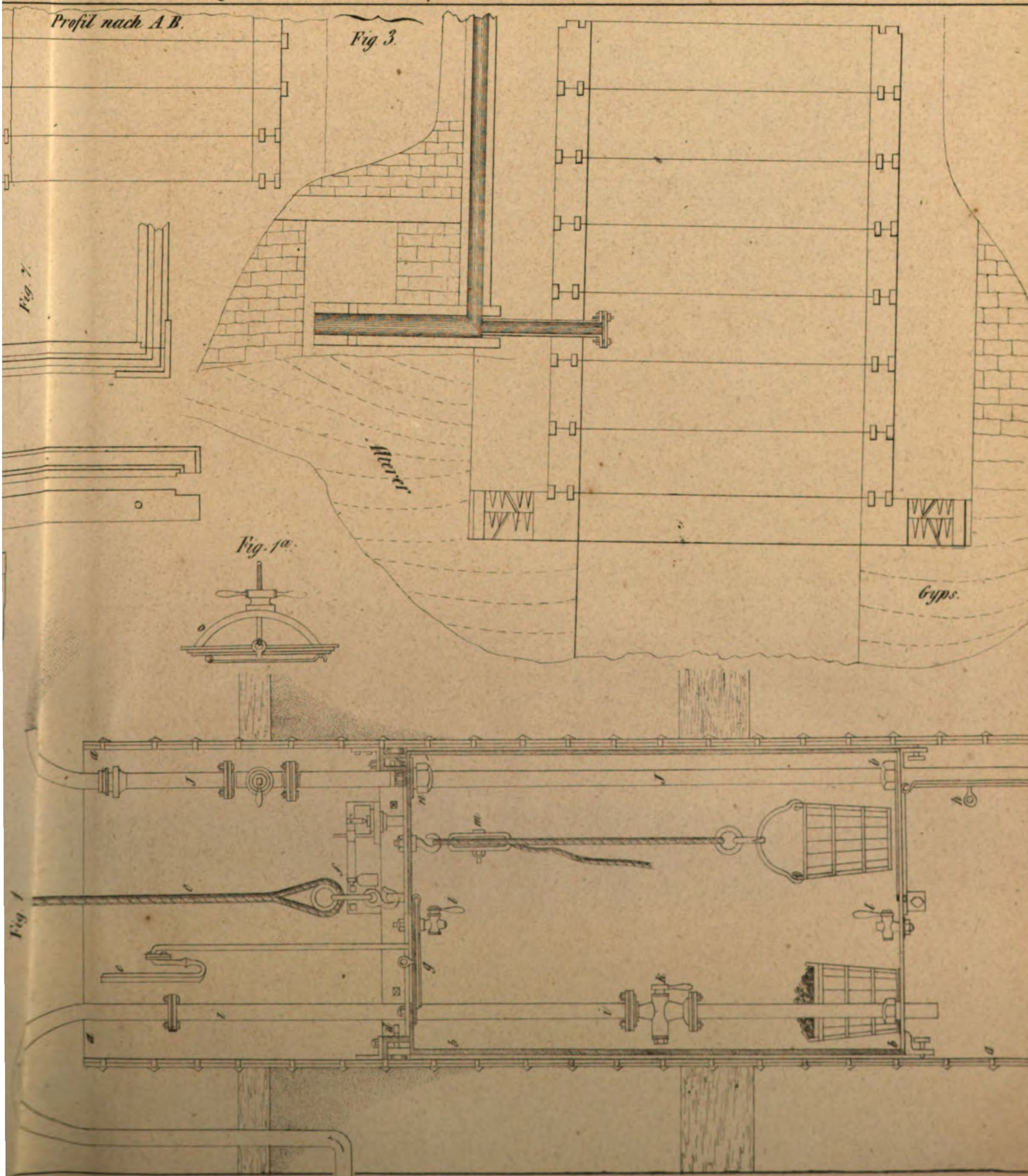
Verdämmung der Schächte mit Holz und Gussei

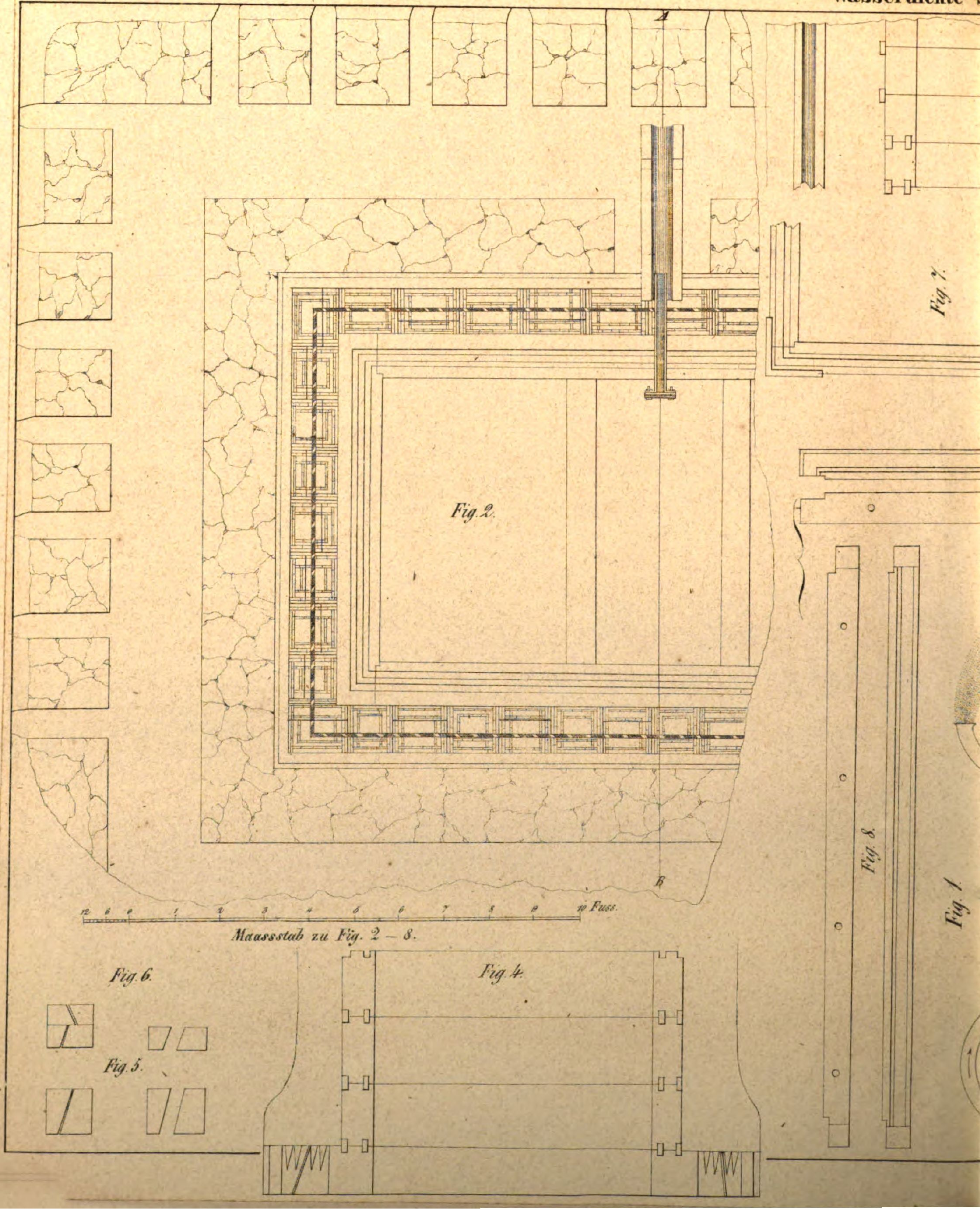



Fig. 9.
Fig. 11.
c c
m m
Fig. 12.
a a
Fig. 13.
c c
c c
v v
a a
Fig. 14.
v v
Fig. 15.
a a
Fig. 16.
Fig. 17.
Maassstab der Fig. 1 bis 5, 9 u. 10.
3 mètres
Maassstab der Fig. 6 bis 8.
10 20 30 40 50 60 70 80 90 1 mètre
Maassstab der Fig. 17.
1 2 3 4 5 6 7 8 9 10 mètres

Wasserdichte S




Profil nach A.B.
Fig. 3.
Fig. 7.
Mergel
Fig. 1a.
Gyps.
Fig. 1


A
Fig. 7.
Fig. 2.
Fig. 8.
Fig. 1.
B
12 6 0 1 2 3 4 5 6 7 8 9 10 Fuss.
Maassstab zu Fig. 2 – 8.
Fig. 4.
Fig. 6.
Fig. 5.

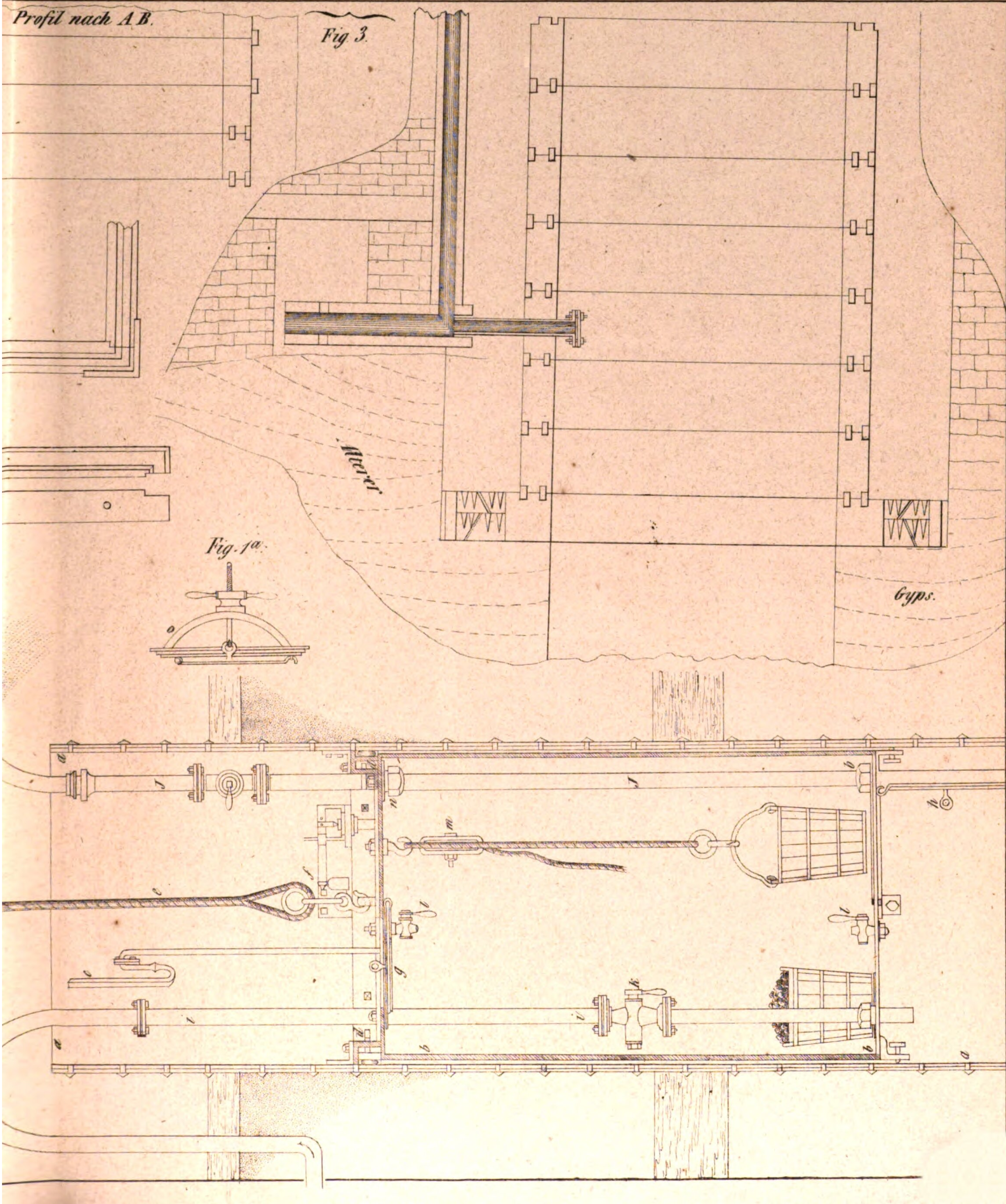
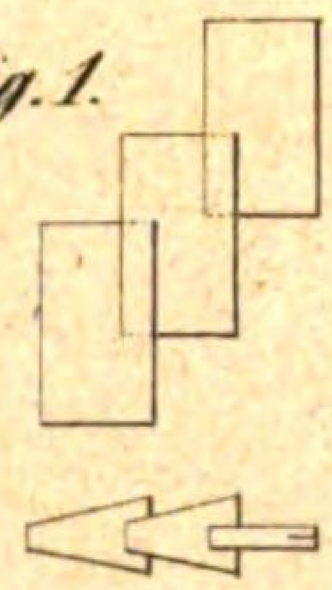

Profil nach A B.
Fig. 3.
Fig. 1a
Gyps.

Fig. 1.



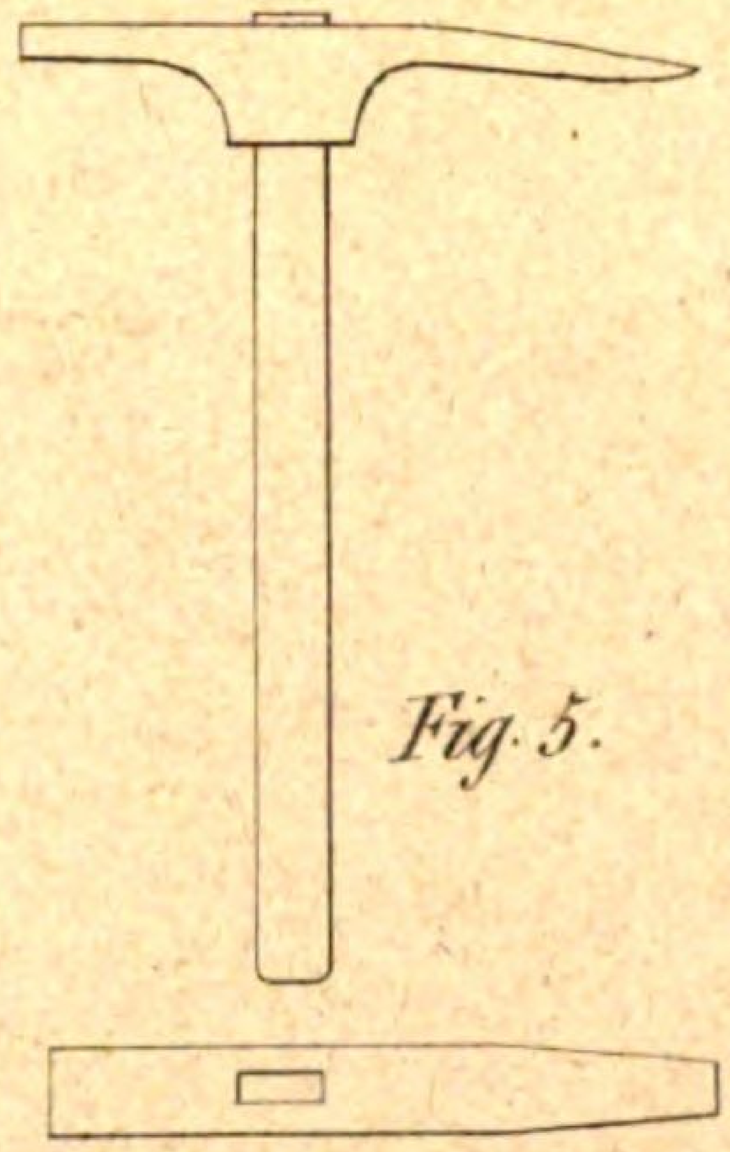


Fig. 5.

Fig. 6.



Fig. 1

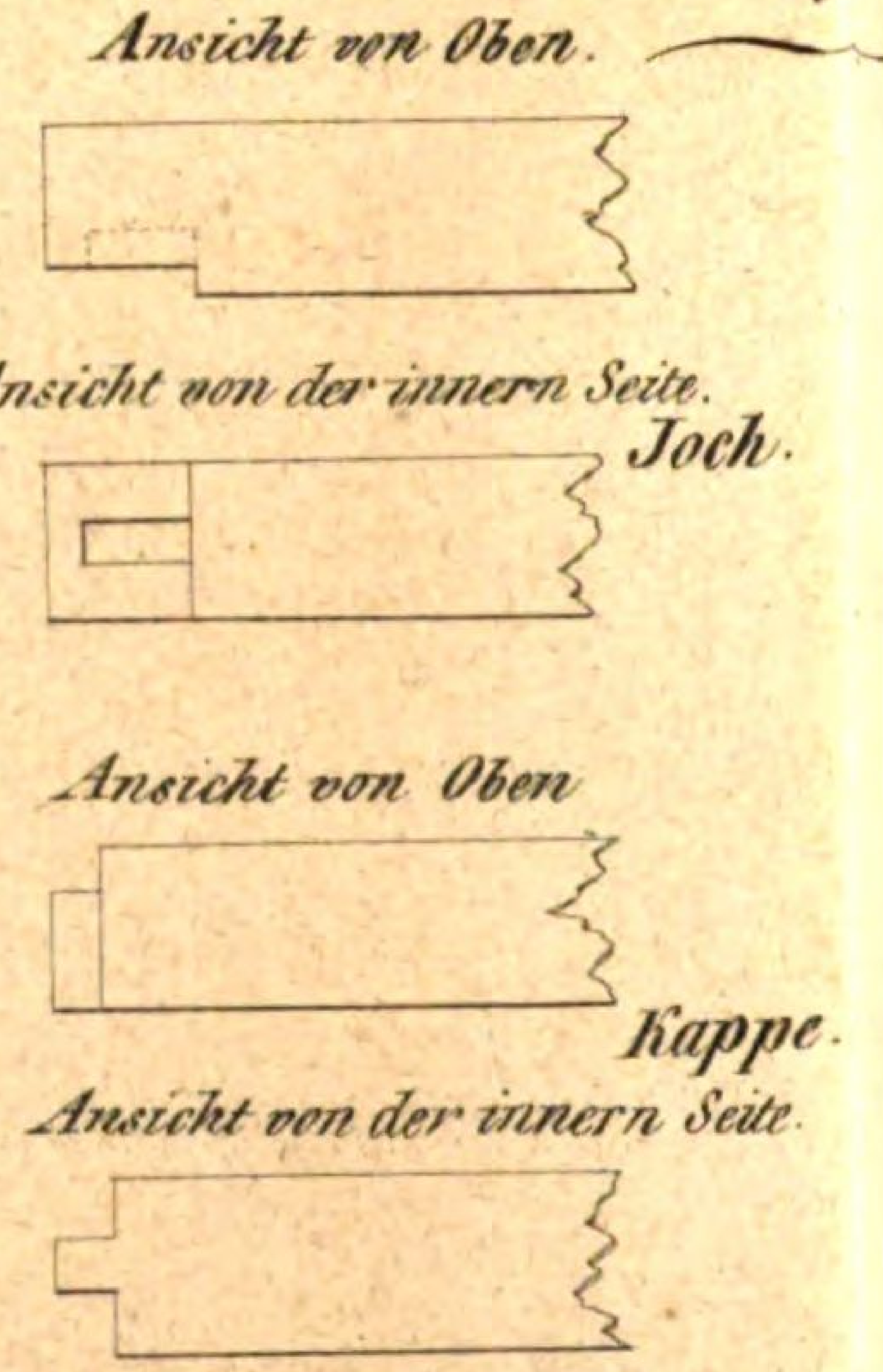
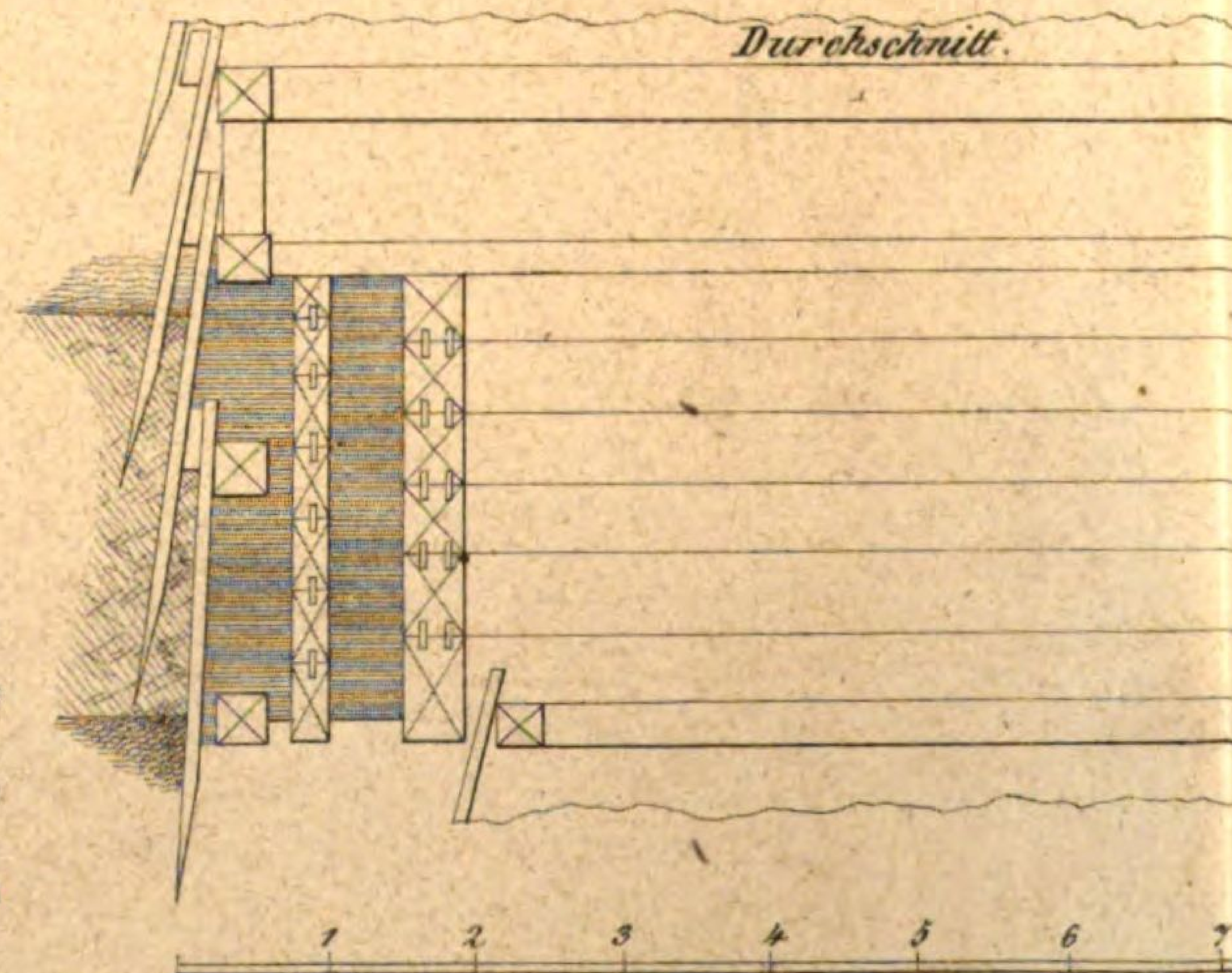
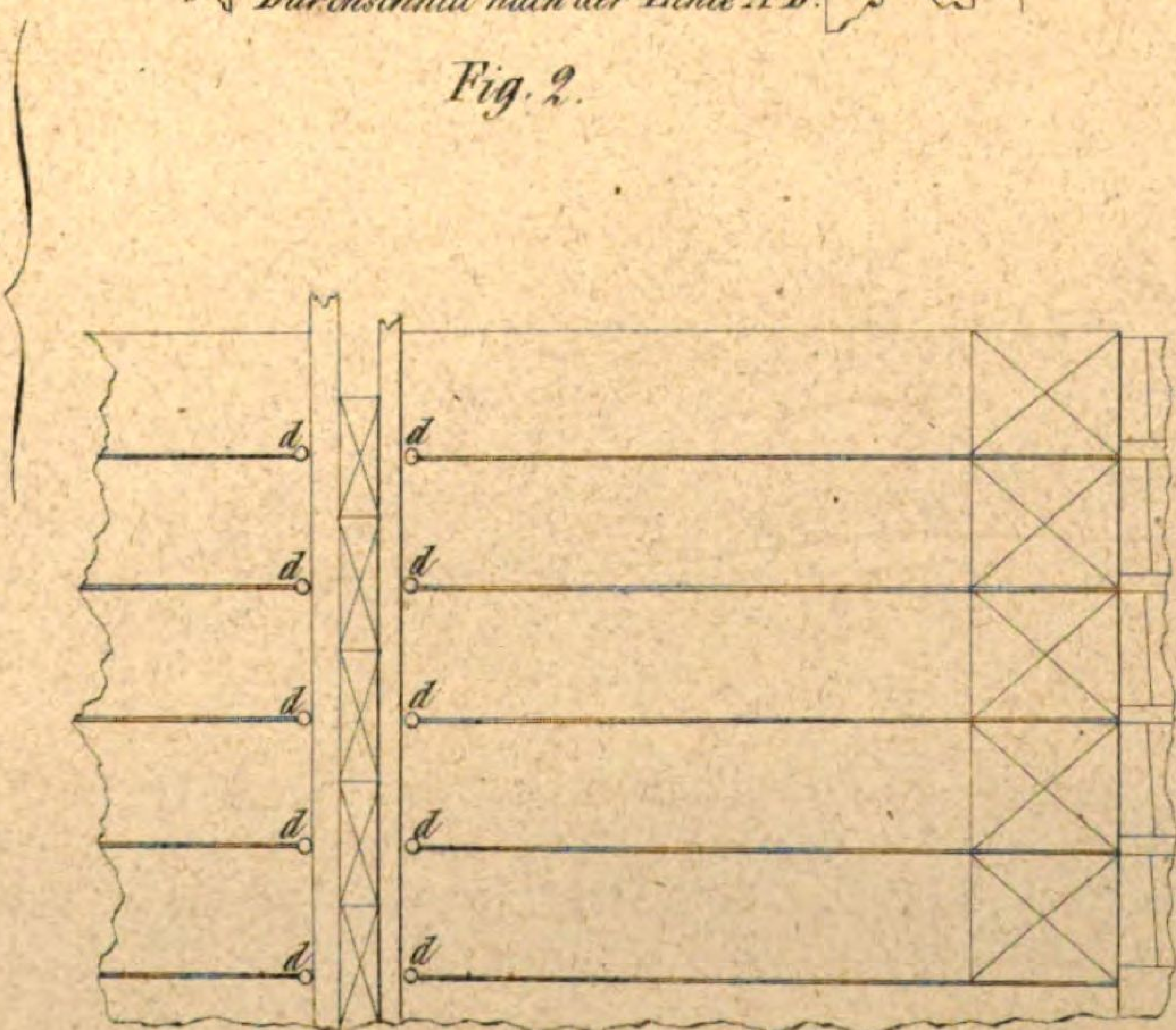




Fig. 2.

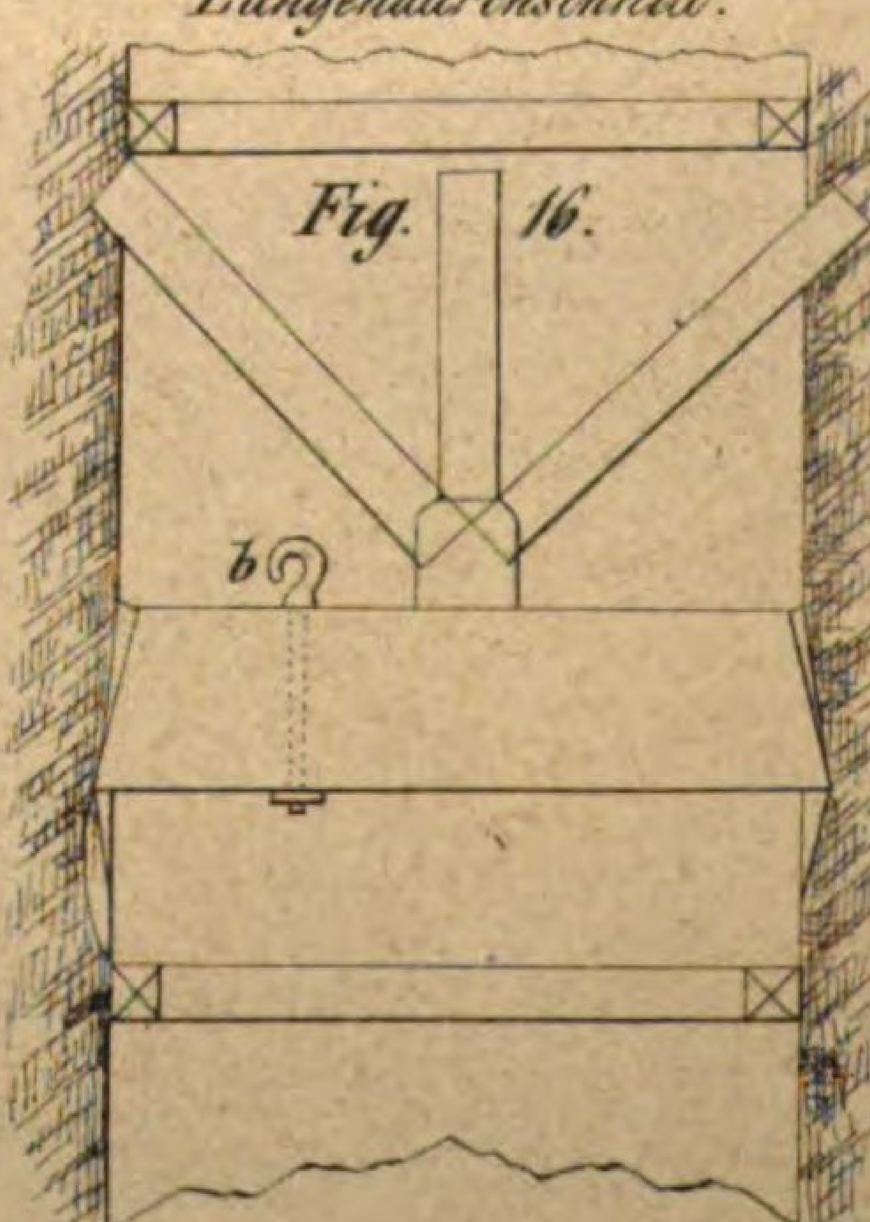
Fig. 11.





Längendurchschnitt.

Fig. 16.



Querdurchschnitt.

Fig. 17.

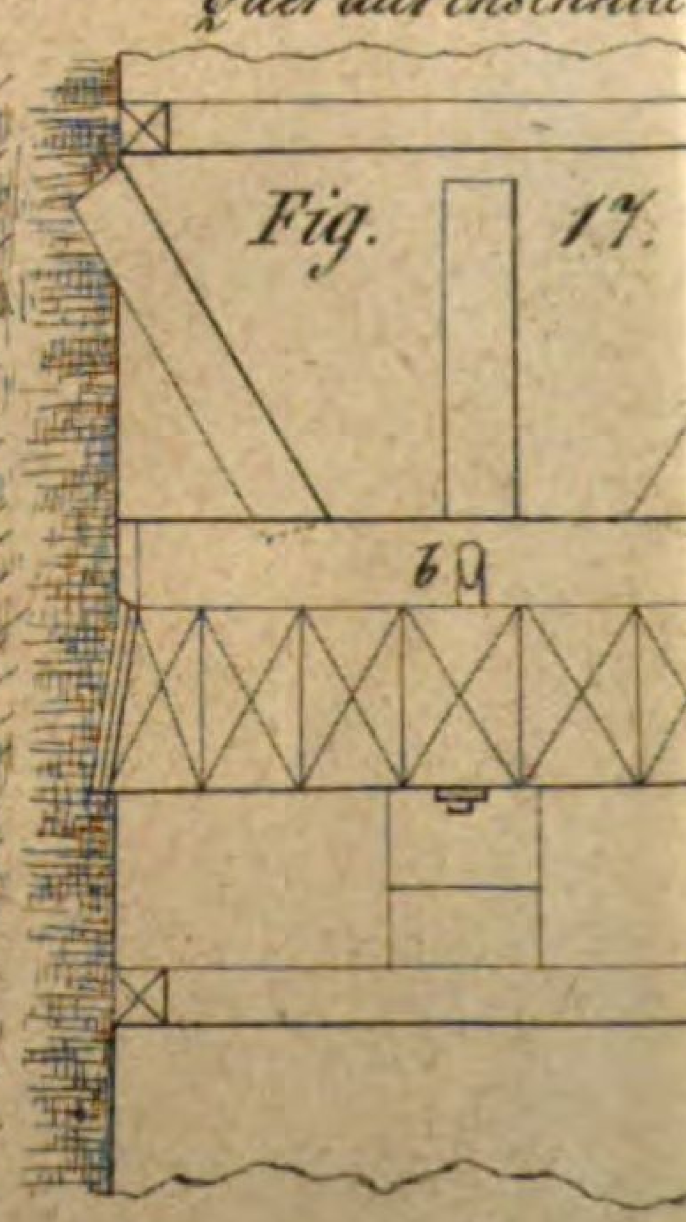
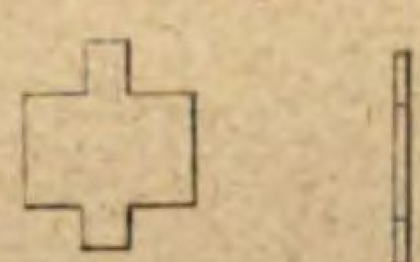
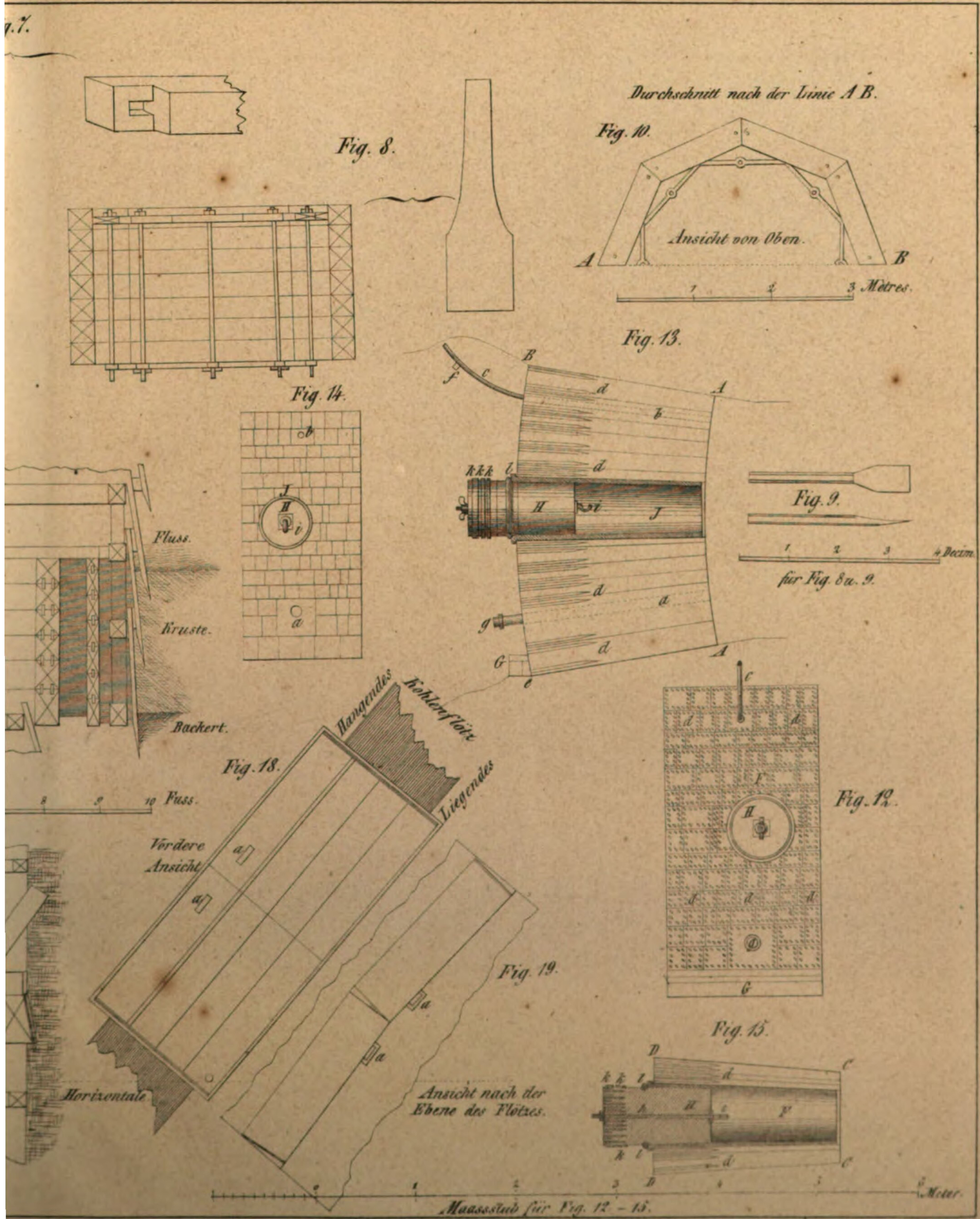


Fig. 4.



Fig. 3.




g. 7.
Fig. 8.
Durchschnitt nach der Linie A B.
Fig. 10.
Ansicht von Oben.
A
B
1 2 3 Metres.
Fig. 13.
Fig. 14.
Fig. 9.
1 2 3 4 Decim.
für Fig. 8 u. 9.
Fluss.
Kruste.
Backert.
8 9 10 Fuss.
Fig. 18.
Hangendes
Kohlenflötz
Liegendes
Vordere Ansicht
Fig. 12.
Fig. 19.
Horizontale.
Ansicht nach der Ebene des Flötzes.
Fig. 15.
0 1 2 3 4 5 6 Meter.
Maassstab für Fig. 12. – 15.

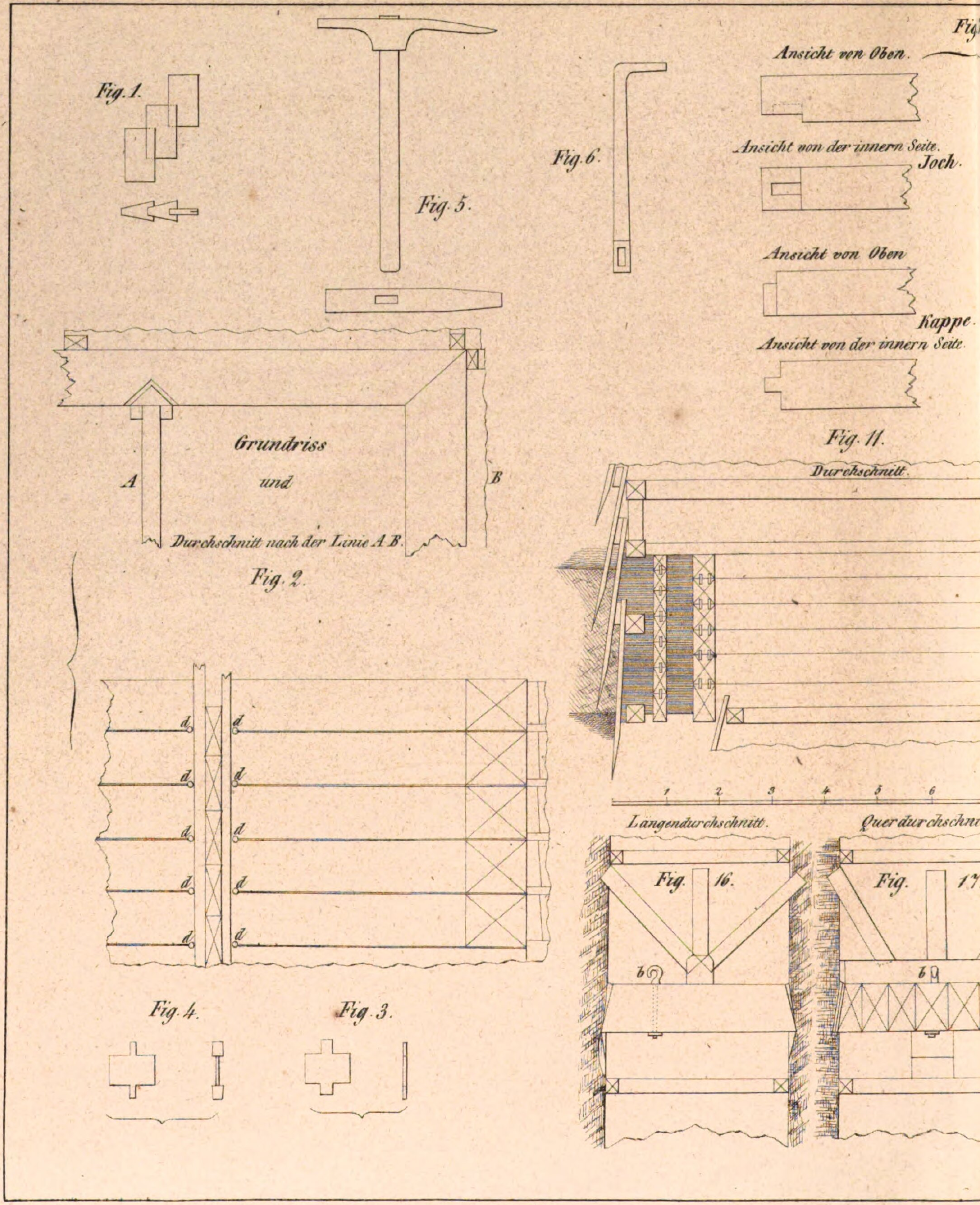
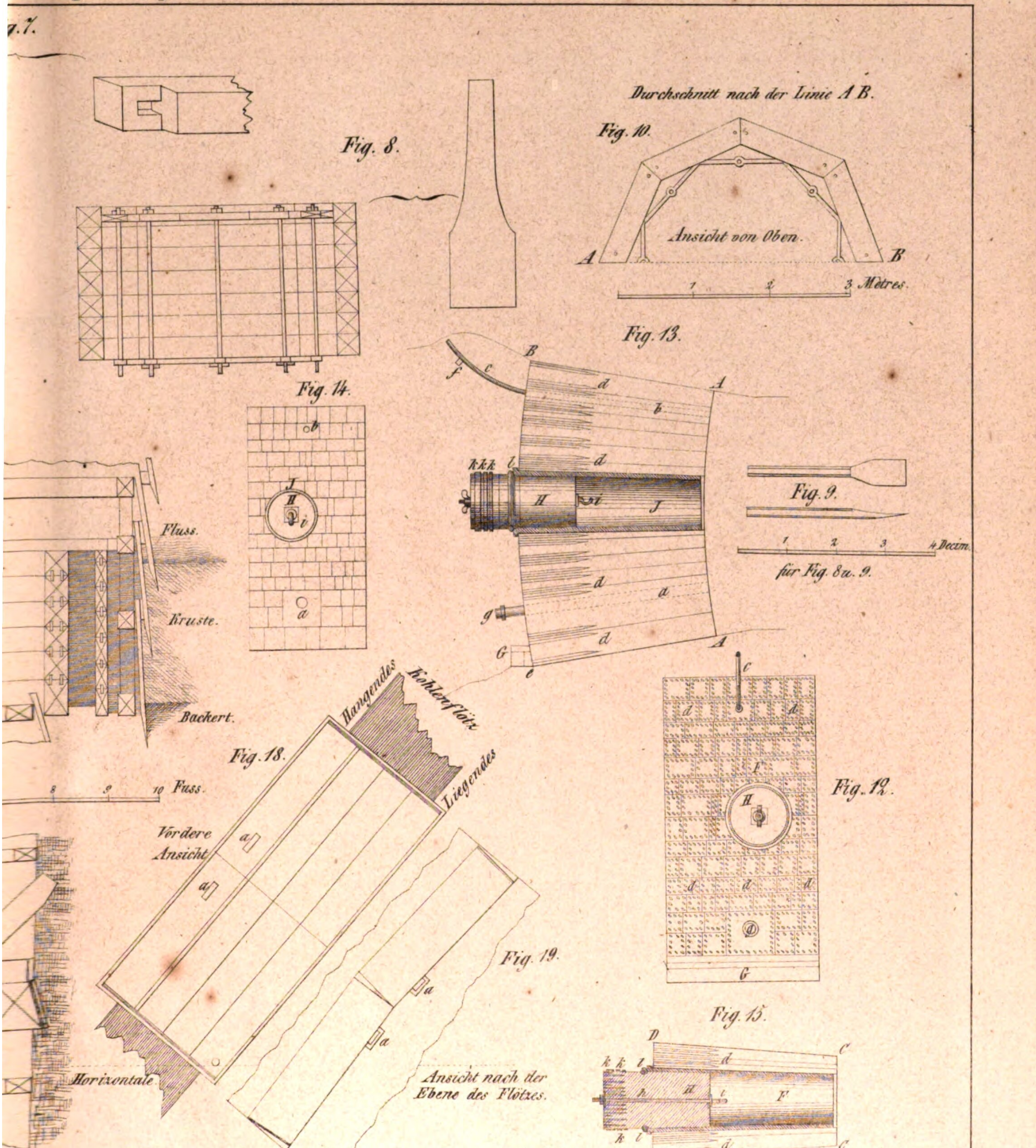
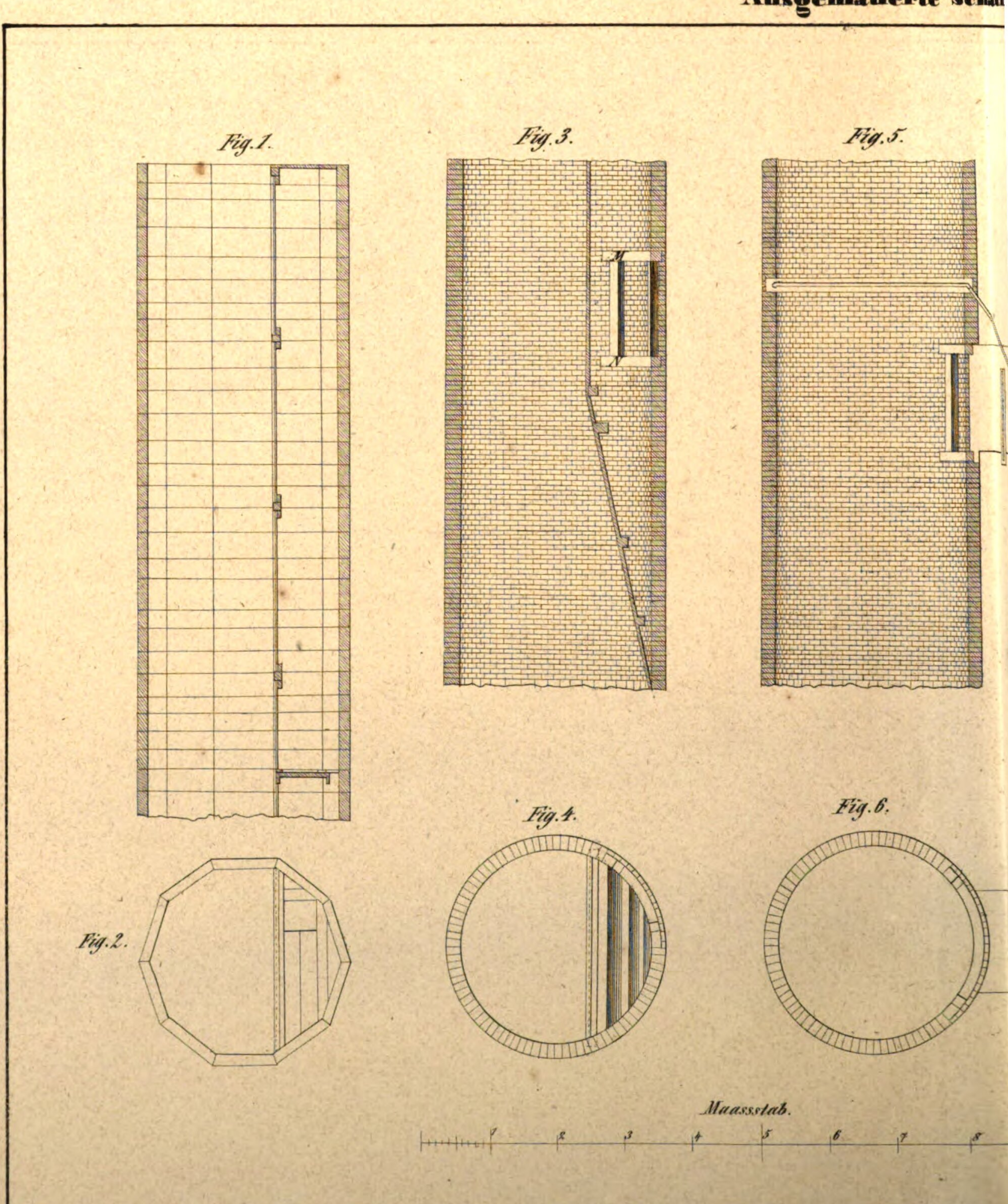


Fig. 1.
Fig. 5.
Fig. 6.
Ansicht von Oben.
Ansicht von der innern Seite.
Joch.
Ansicht von Oben
Kappe.
Ansicht von der innern Seite.
Grundriss
und
Durchschnitt nach der Linie A B.
A
B
Fig. 2.
Fig. 11.
Durchschnitt.
d
1
2
3
4
5
6
Längendurchschnitt.
Querdurchschni
Fig. 16.
Fig.
b
Fig. 4.
Fig. 3.


Fig. 7.
Fig. 8.
Durchschnitt nach der Linie A B.
Fig. 10.
Ansicht von Oben.
A B
1 2 3 Mètres.
Fig. 13.
Fig. 14.
Fig. 9.
1 2 3 4 Decim.
für Fig. 8 u. 9.
Fluss.
Kruste.
Backert.
8 9 10 Fuss.
Hangendes
Kohlenflötz
Liegendes
Fig. 18.
Vordere Ansicht
Fig. 19.
Horizontale
Ansicht nach der Ebene des Flötzes.
Fig. 12.
Fig. 15.
0 1 2 3 4 5 6 Meter.
Maassstab für Fig. 12 – 15.


Fig. 1.
Fig. 3.
Fig. 5.
M
N
Fig. 2.
Fig. 4.
Fig. 6.
Maassstab.
1
2
3
4
5
6
7
8

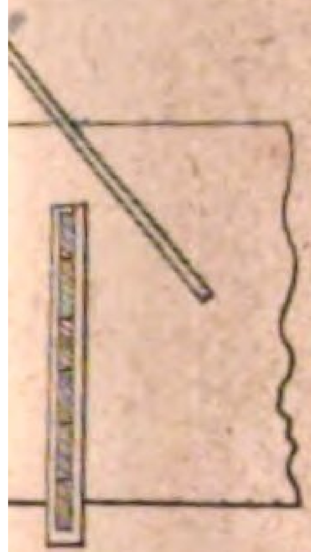


Fig. 9.

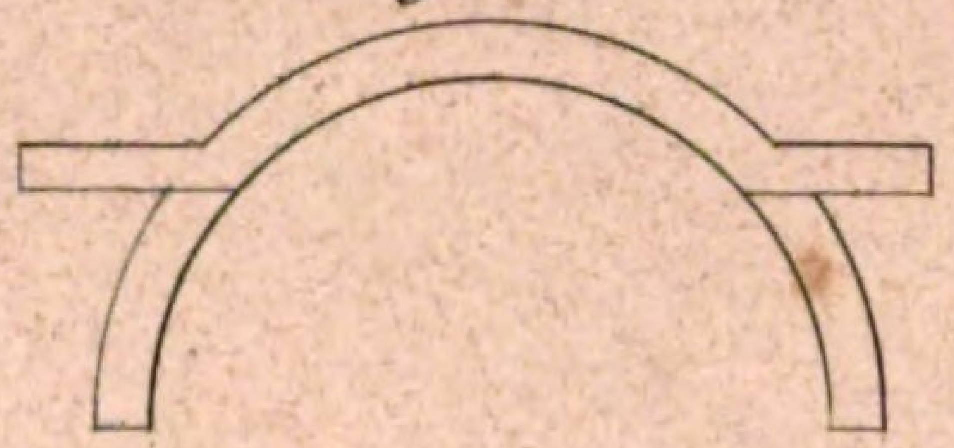


Fig. 10.

Fig. 7.

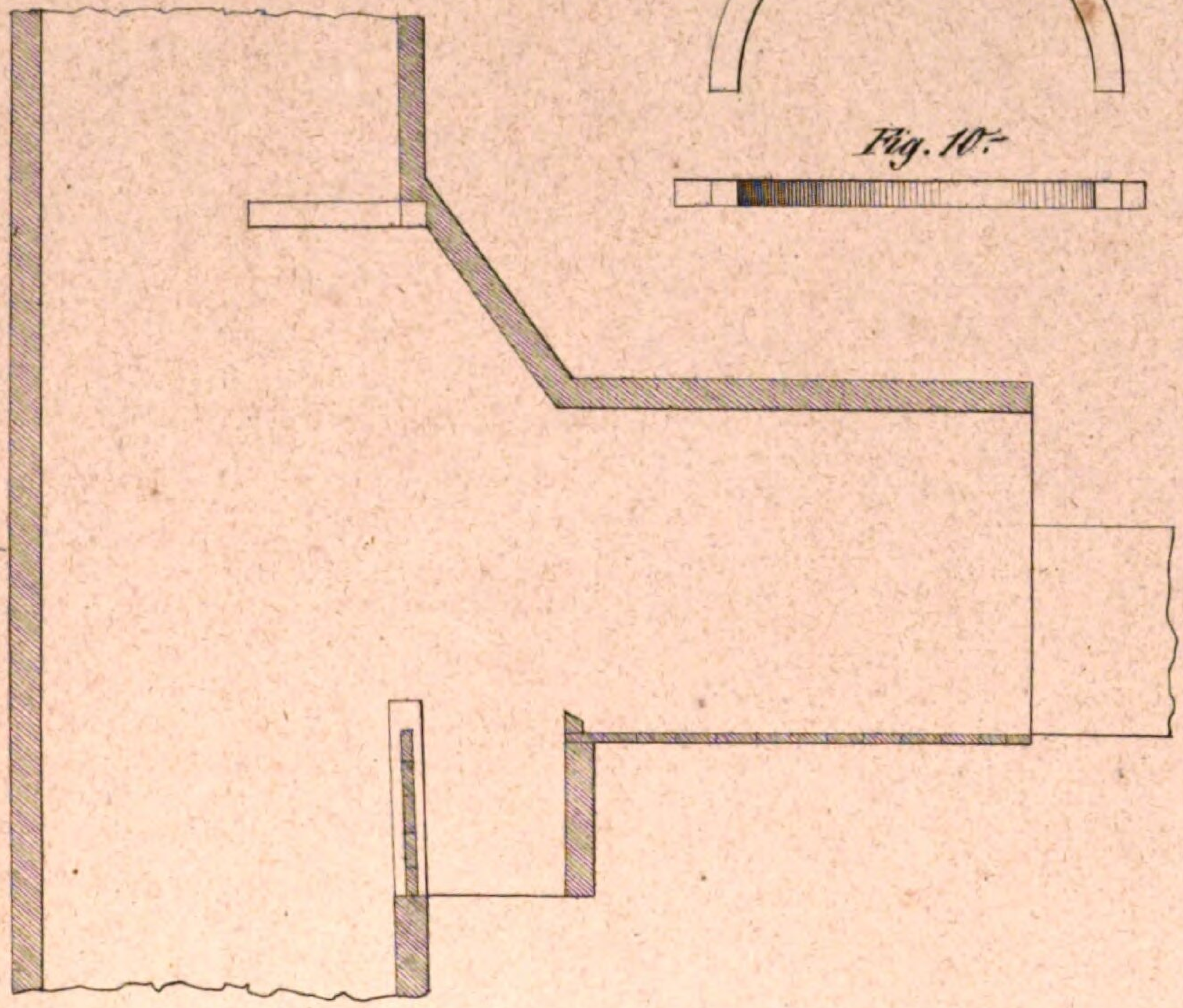
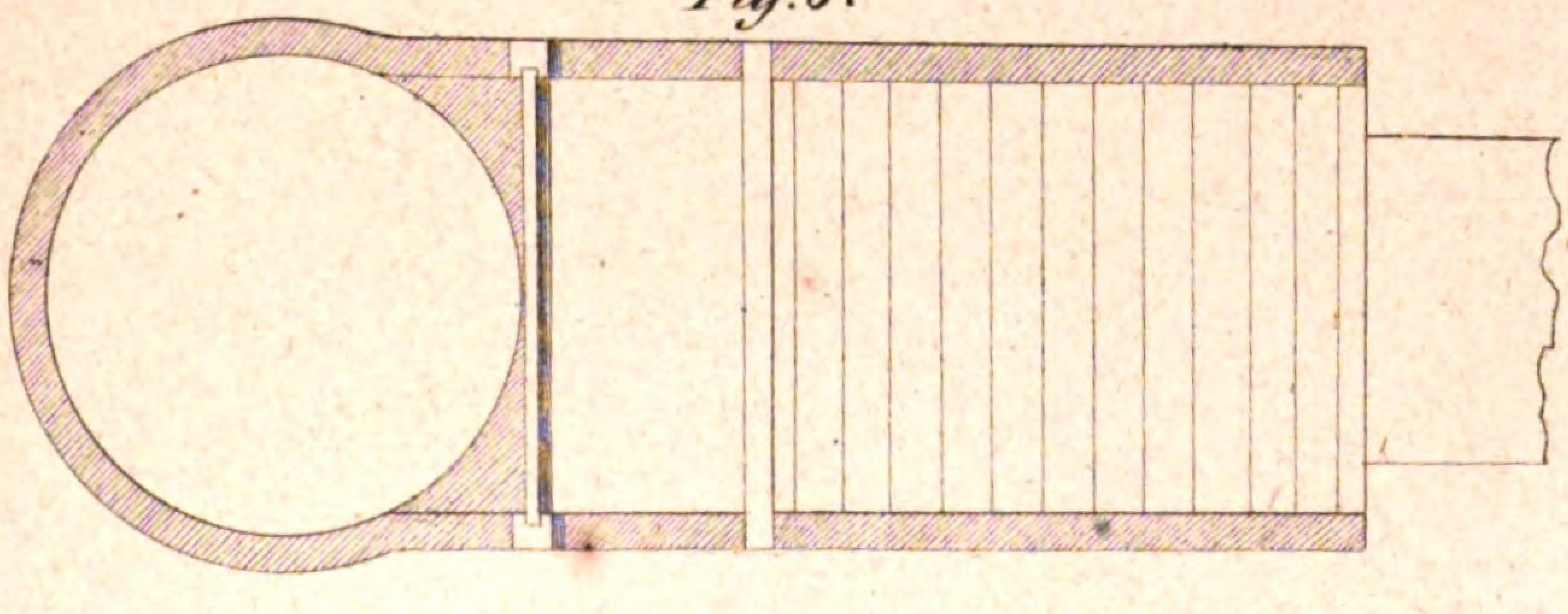
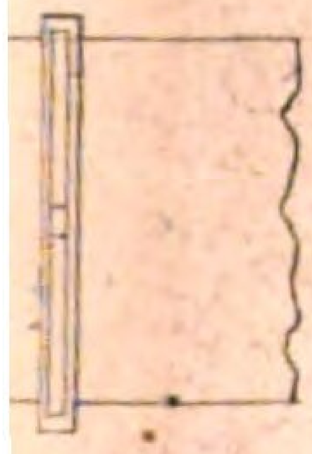


Fig. 8.





9 10 Meter.

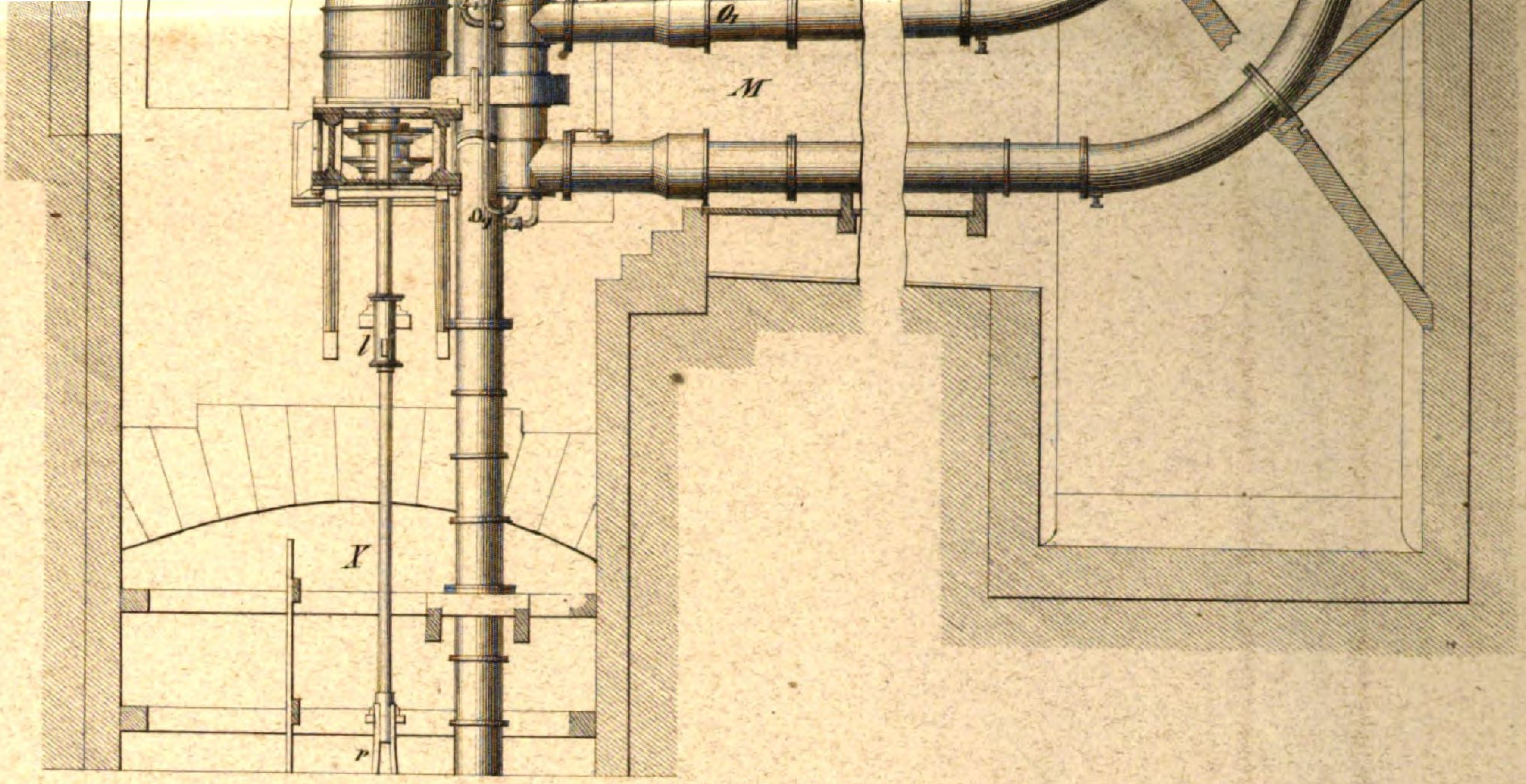
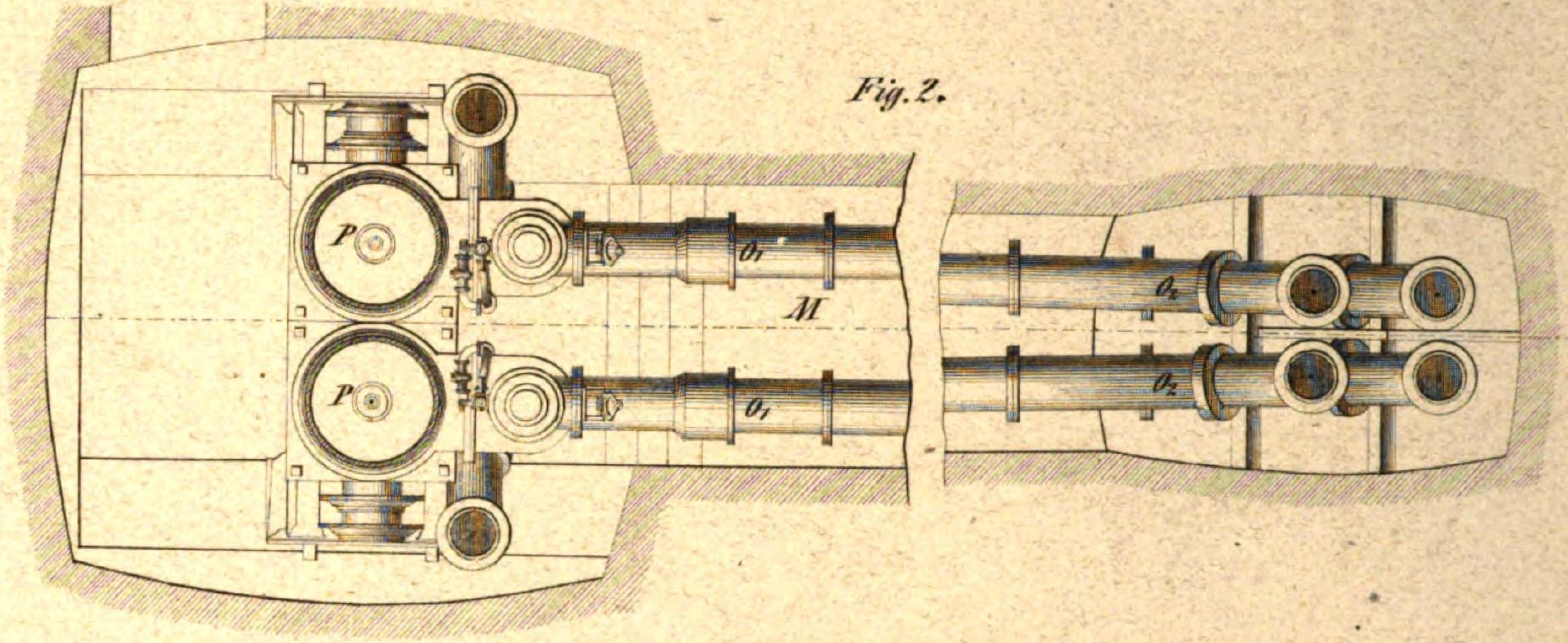
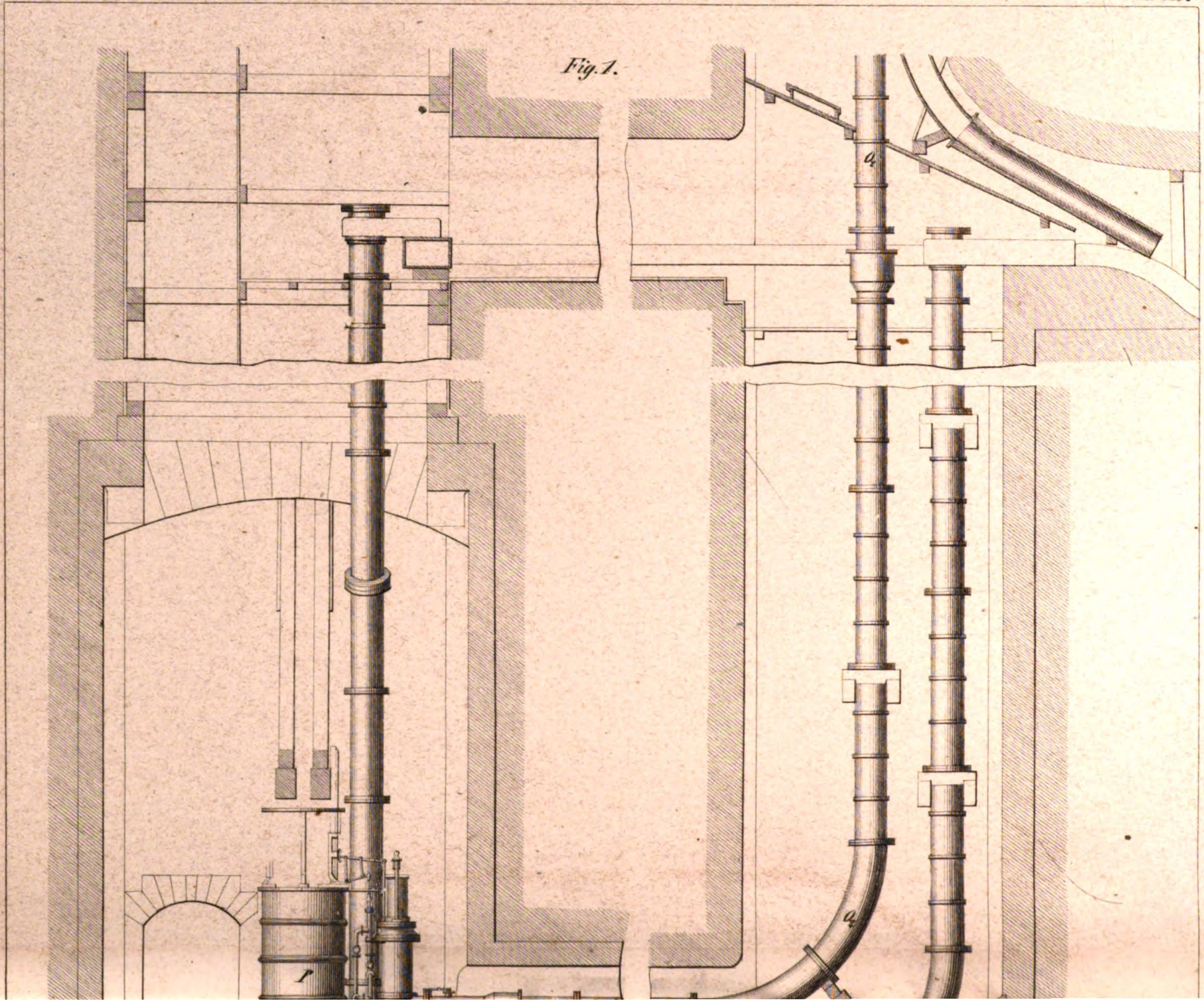


Fig. 2.

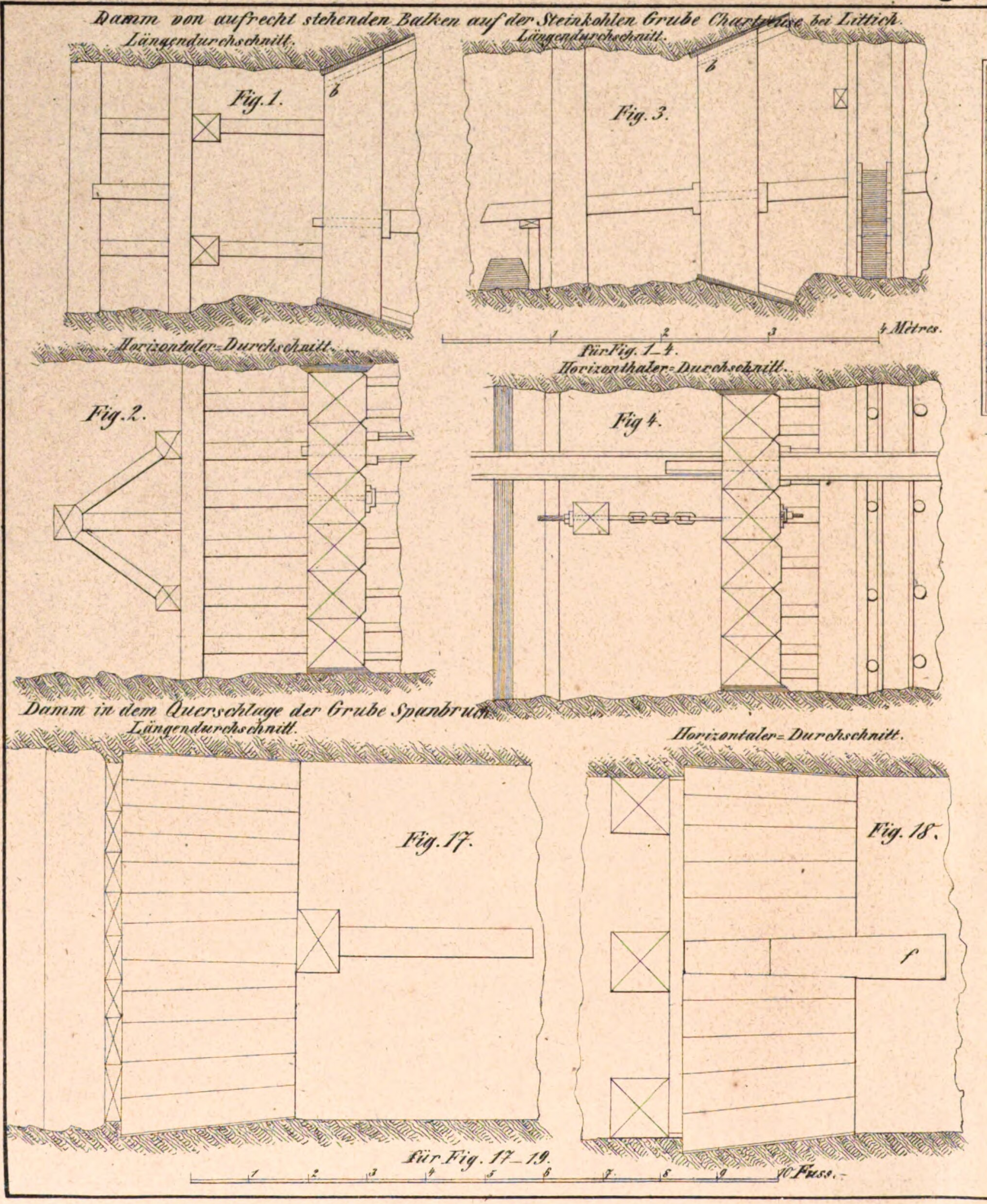


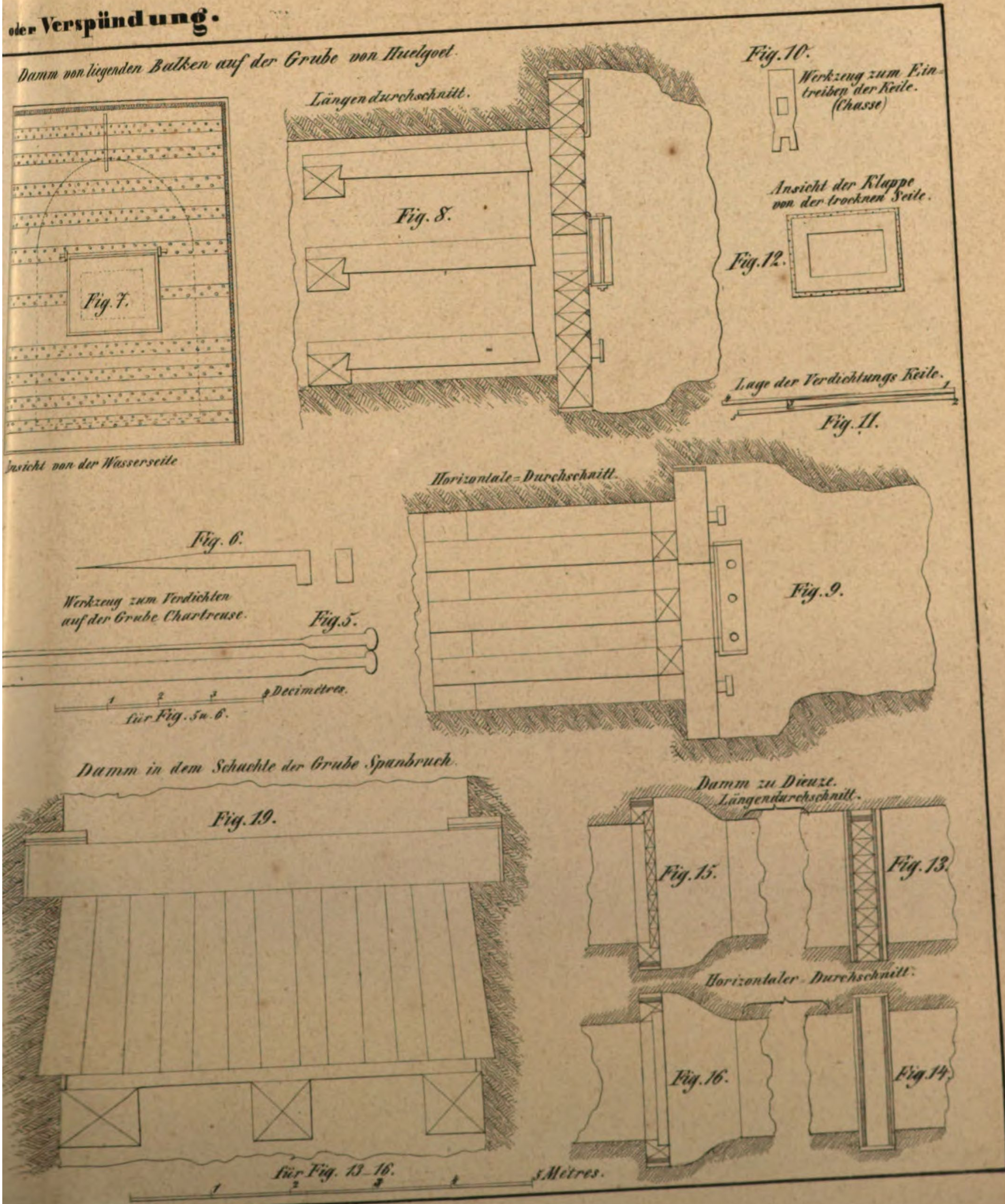
Wassersäulenmaschine zu Huelgoat.

XVIII.

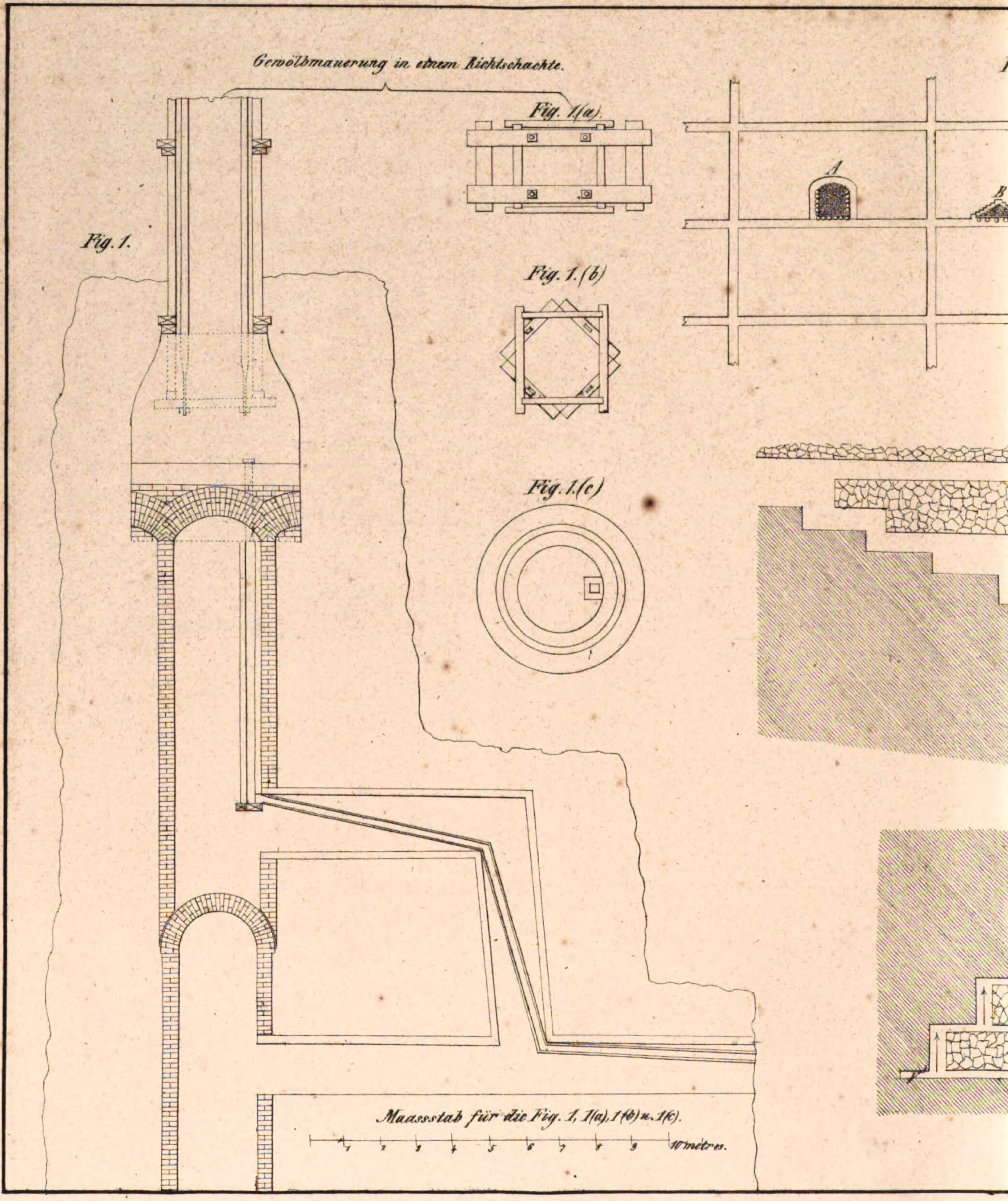


Verdämmung o




Damm von liegenden Balken auf der Grube von Huelgoet.
Längendurchschnitt.
Fig. 7.
Ansicht von der Wasserseite
Fig. 8.
Fig. 10.
Werkzeug zum Eintreiben der Keile. (Chasse)
Ansicht der Klappe von der trocknen Seite.
Fig. 12.
Lage der Verdichtungs Keile.
Fig. 11.
Horizontale=Durchschnitt.
Fig. 9.
Fig. 6.
Werkzeug zum Verdichten auf der Grube Chartreuse.
Fig. 5.
Decimètres.
für Fig. 5 u. 6.
Damm in dem Schachte der Grube Spanbruch.
Fig. 19.
Damm zu Dieuze.
Längendurchschnitt.
Fig. 15.
Fig. 13.
Horizontaler Durchschnitt.
Fig. 16.
Fig. 14.
für Fig. 13–16.
Mètres.

Abbau schwach



ig. 2.

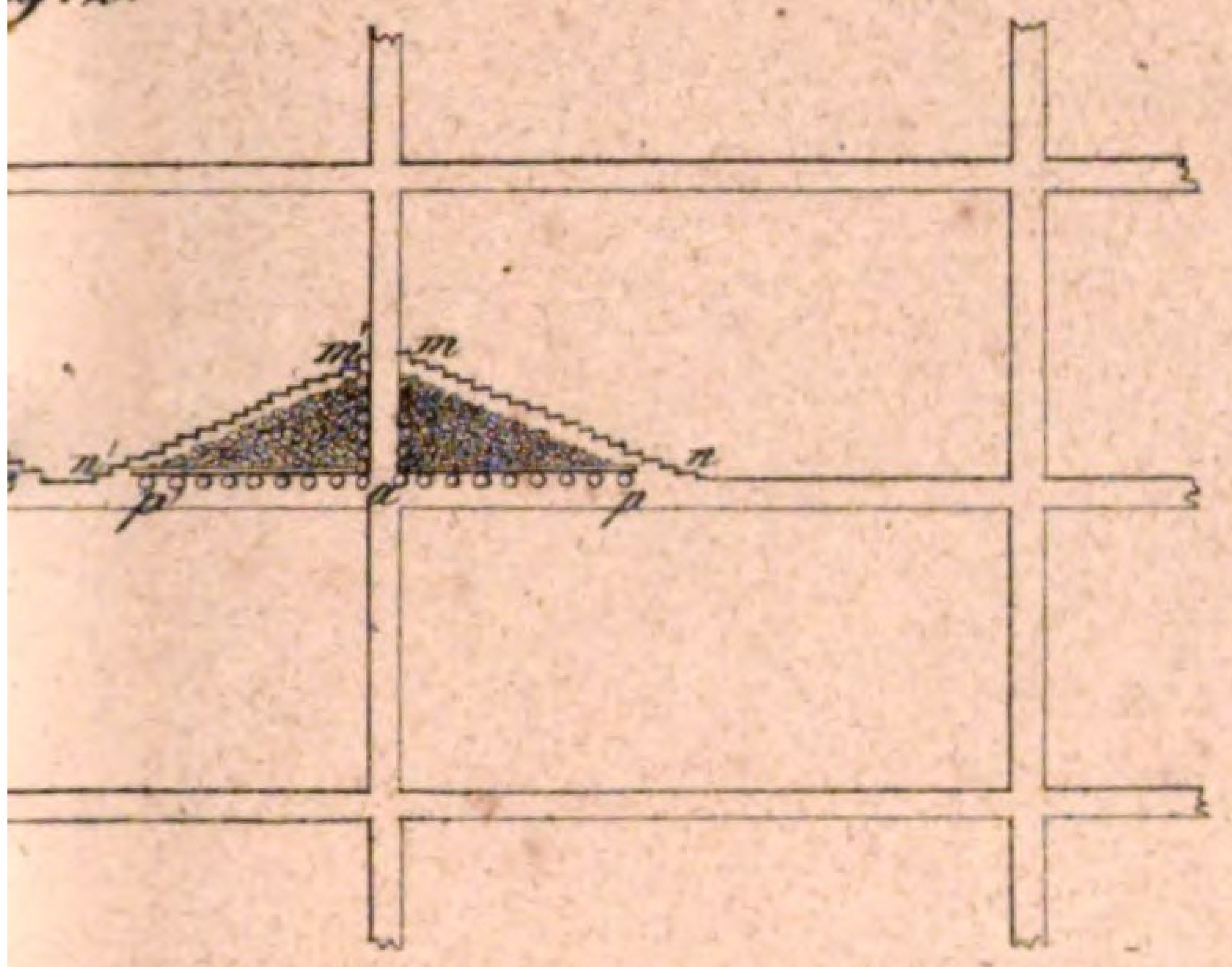


Fig. 4.

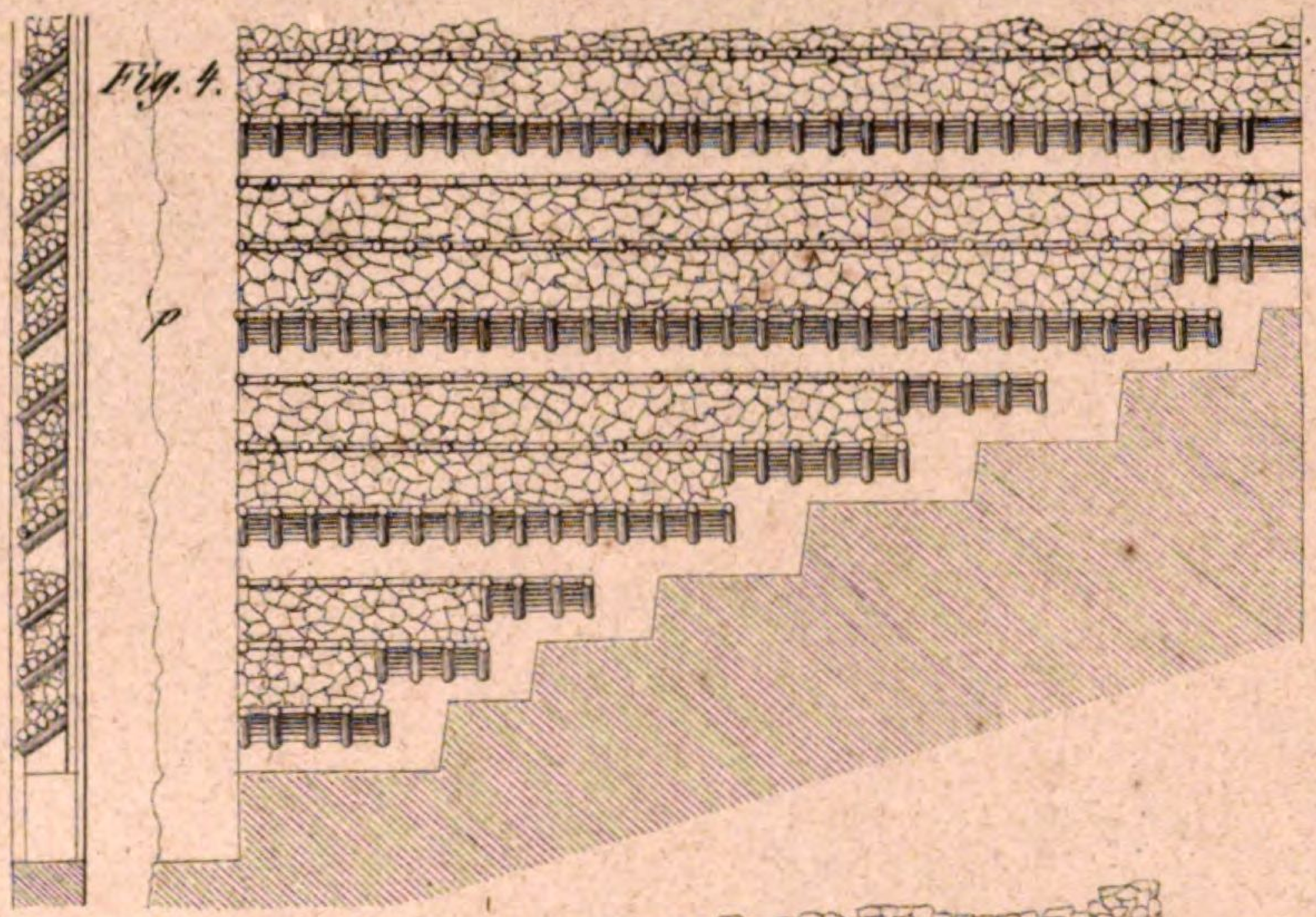


Fig. 3.

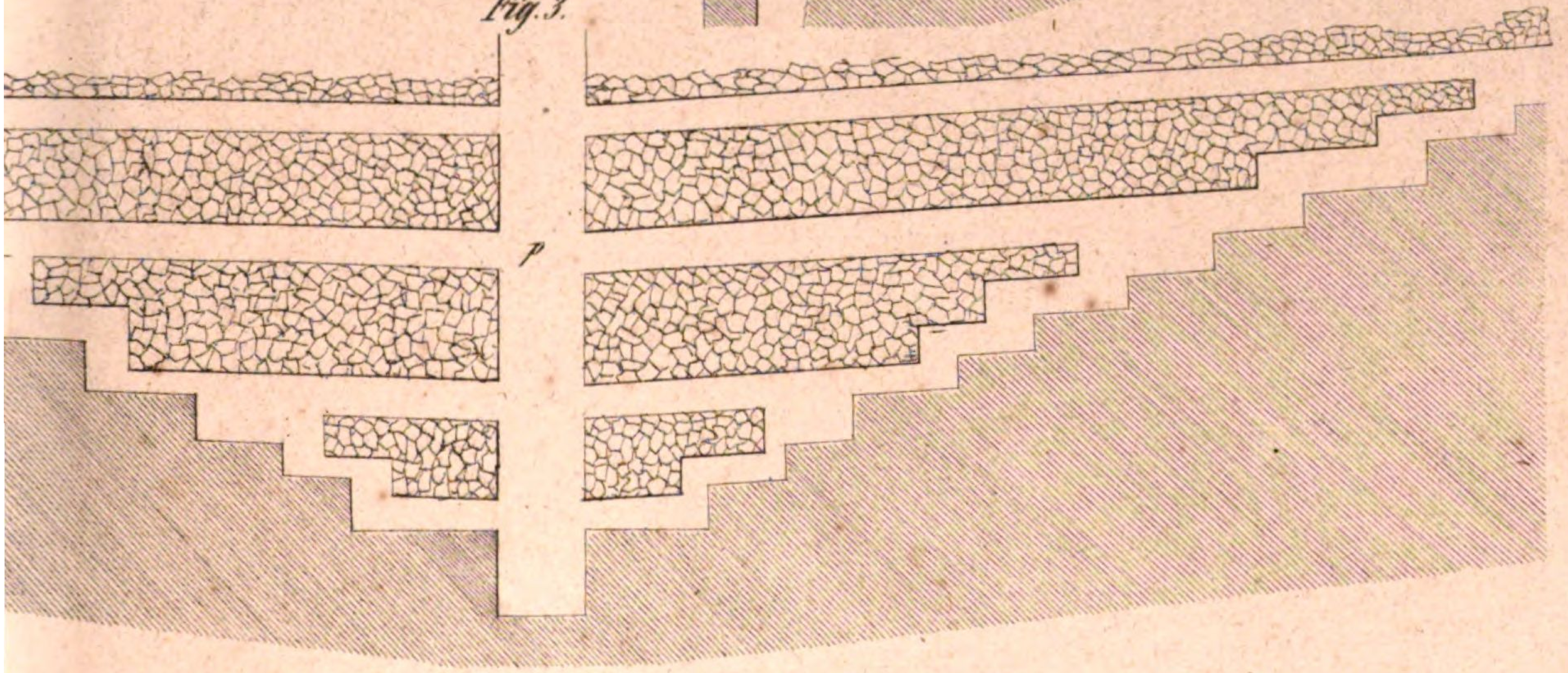
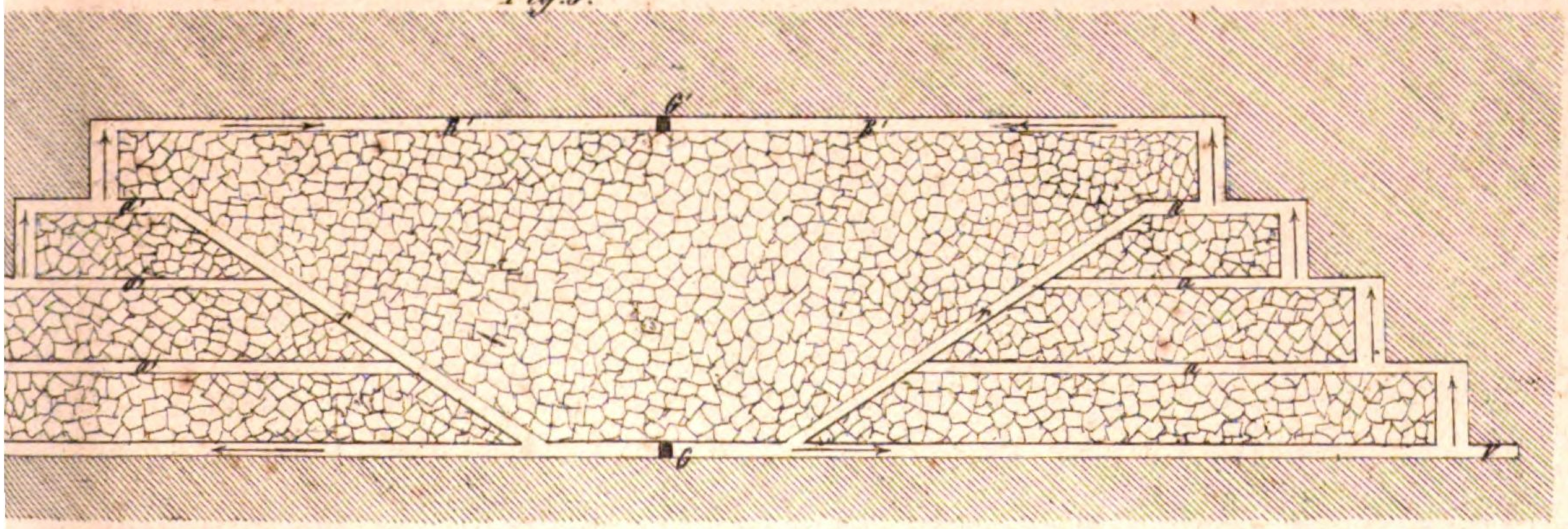


Fig. 5.



Abb

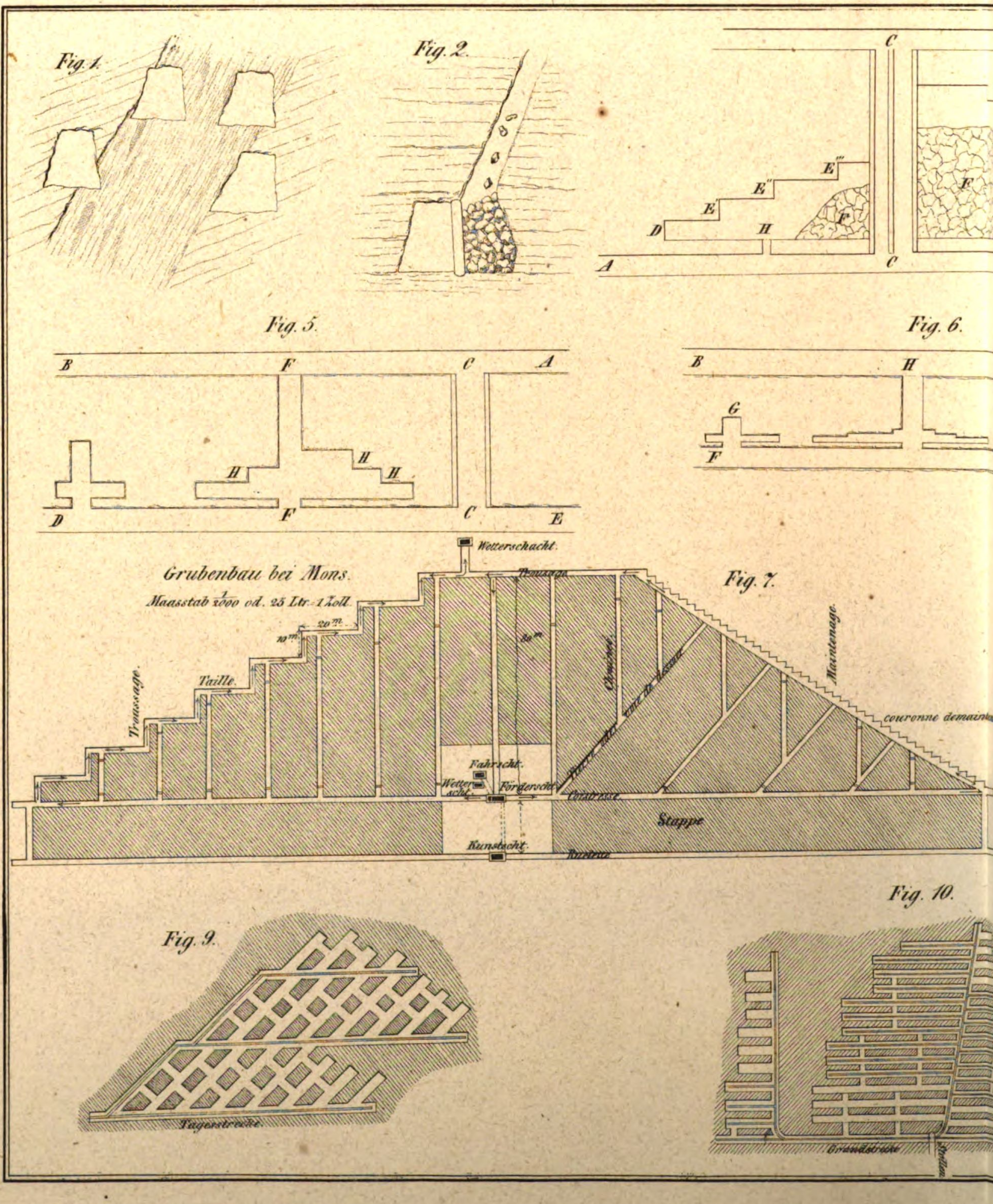

Fig. 1.
Fig. 2.
Fig. 5.
Fig. 6.
Grubenbau bei Mons.
Maasstab 1/2000 od. 25 Ltr. = 1 Zoll.
Wetterschacht.
Fig. 7.
Taille.
Maintenage.
Fahrscht.
Förderscht.
Stappe
Kunstscht.
Fig. 9.
Tagesstrecke
Fig. 10.
Grundstrecke

Fig. 3.

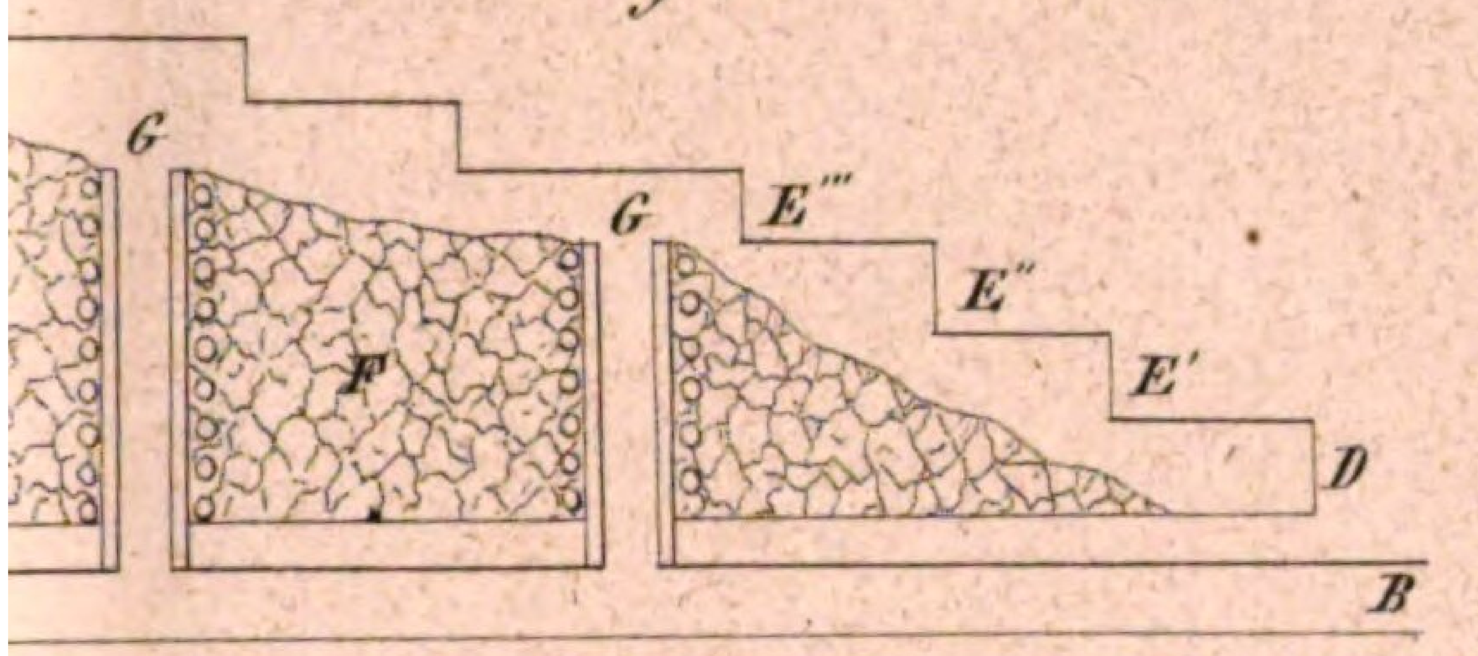
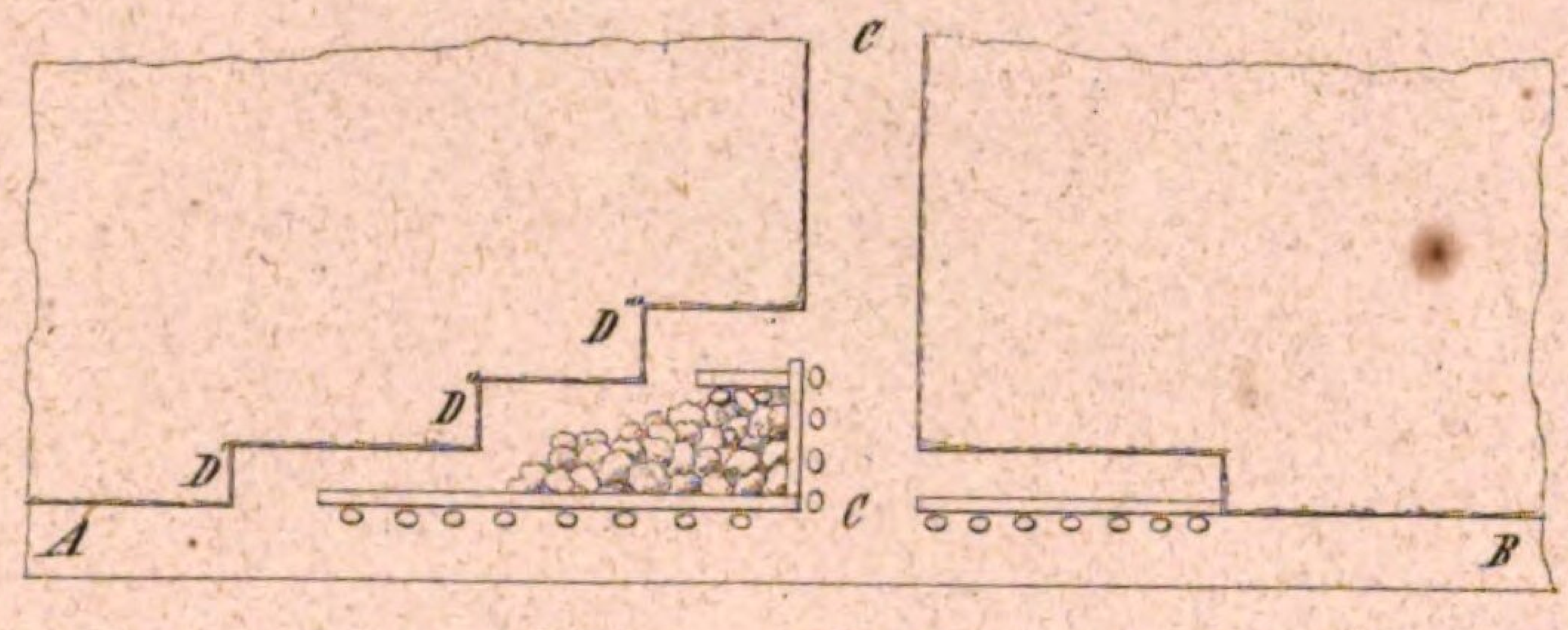
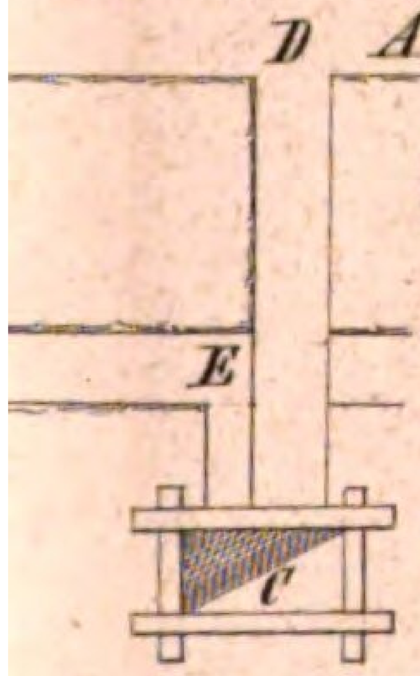
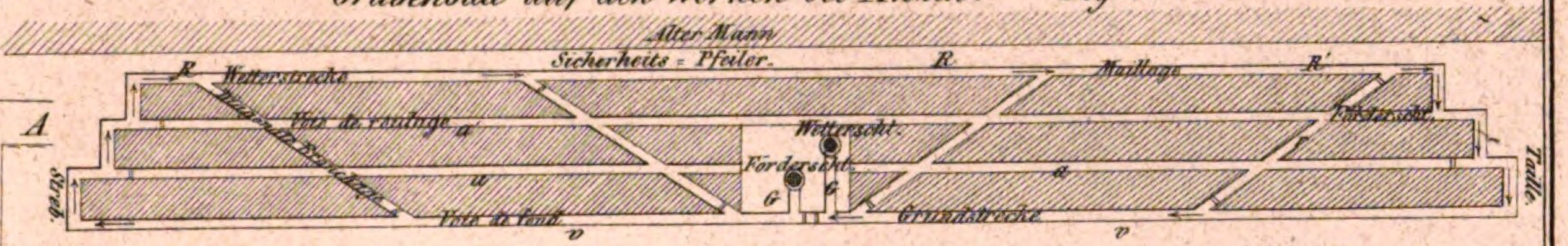


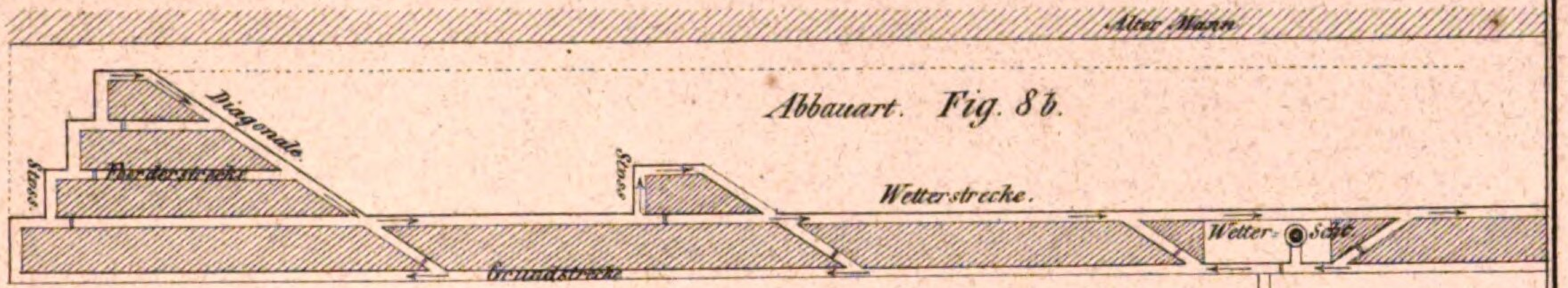
Fig. 4.



Grubenbau auf den Werken bei Anzin. Fig. 8a.







Abbauart. Fig. 8b.

Maasstab $\frac{1}{2000}$ oder 1 Zoll = 25 Ltr.

Förderschacht.

nage.

Coupur.

Fig. 11.

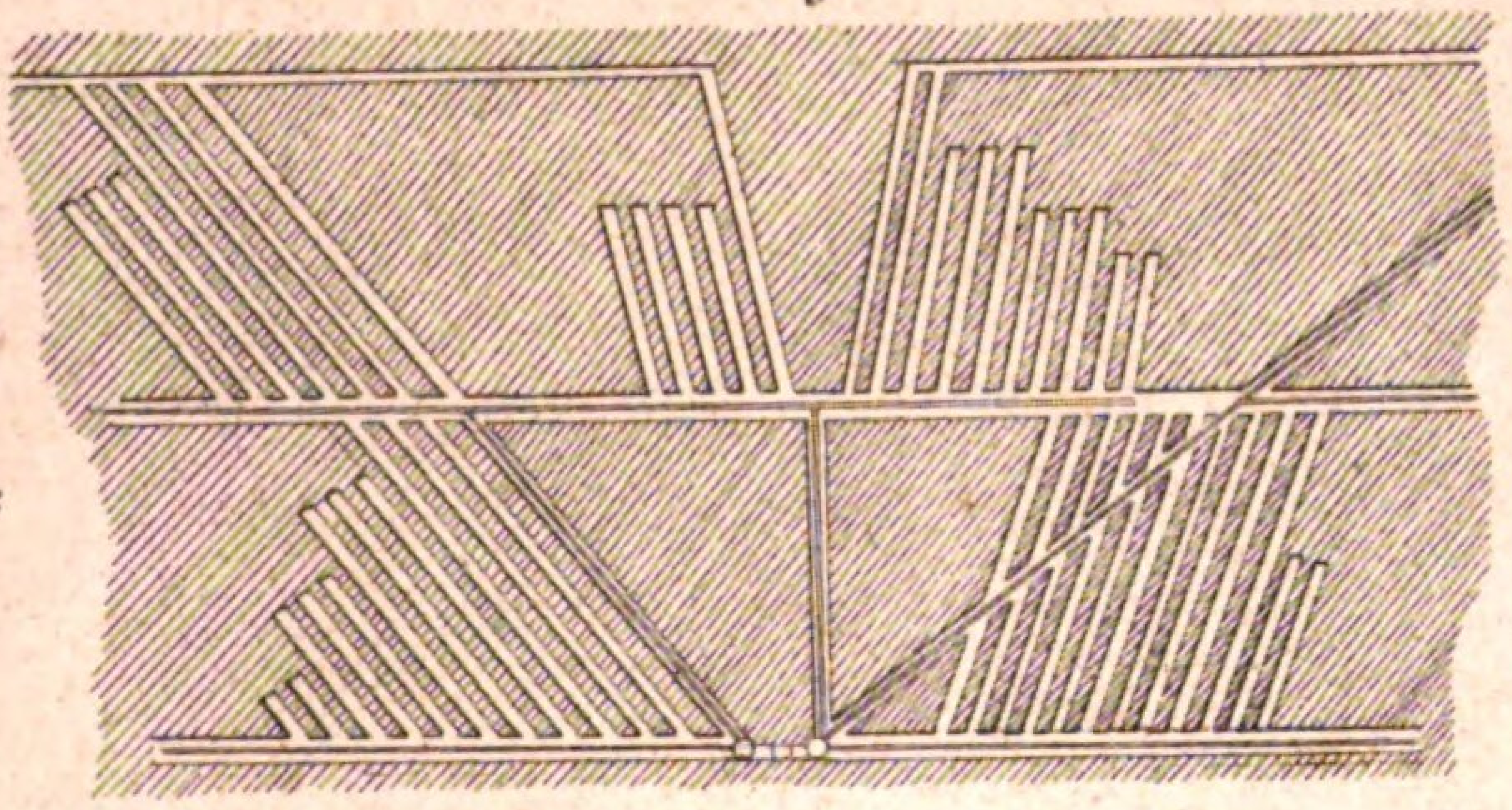
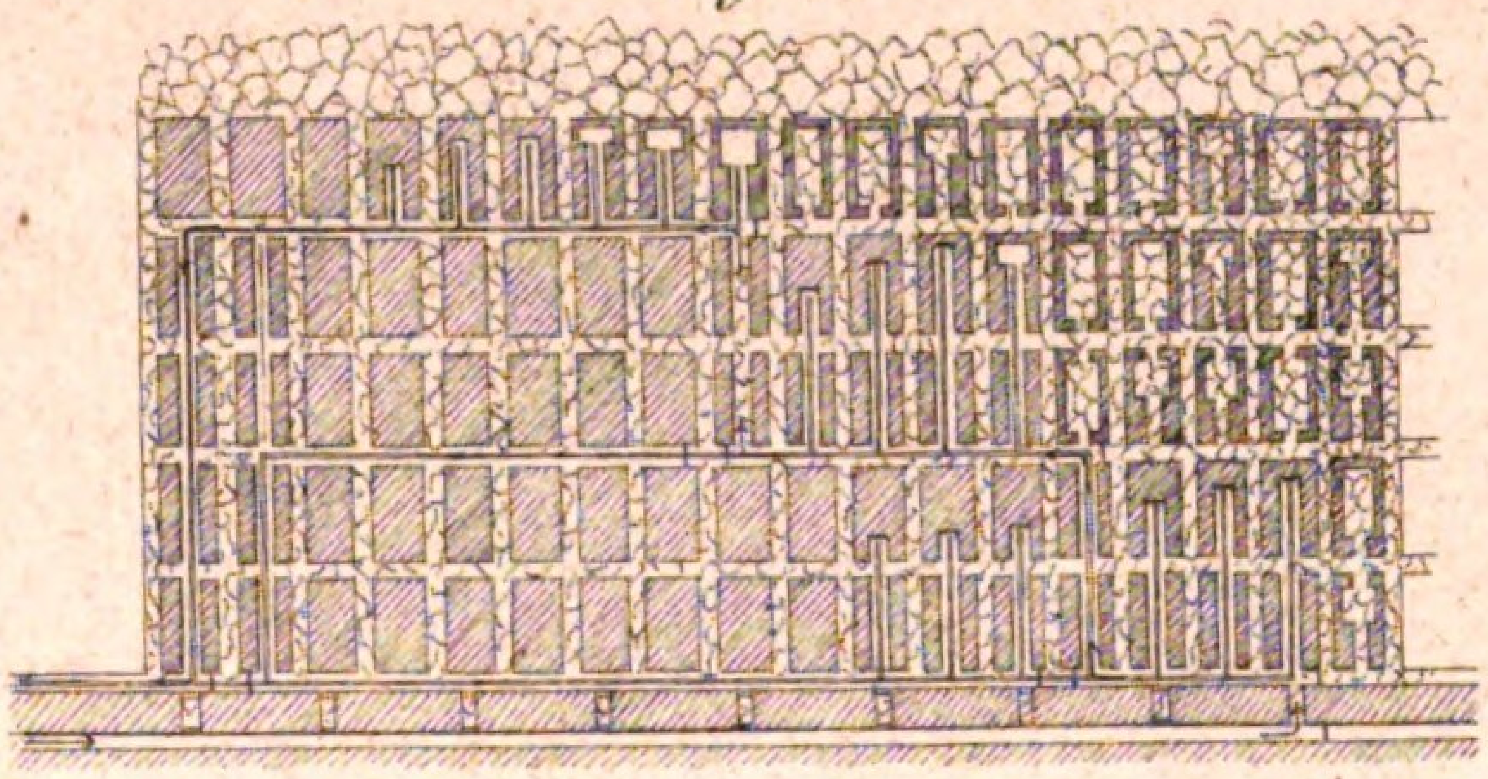


Fig. 12.



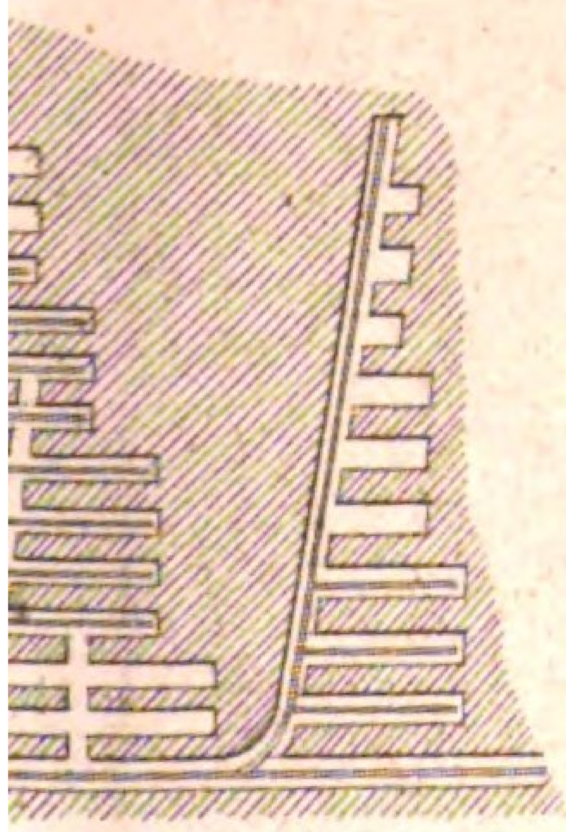
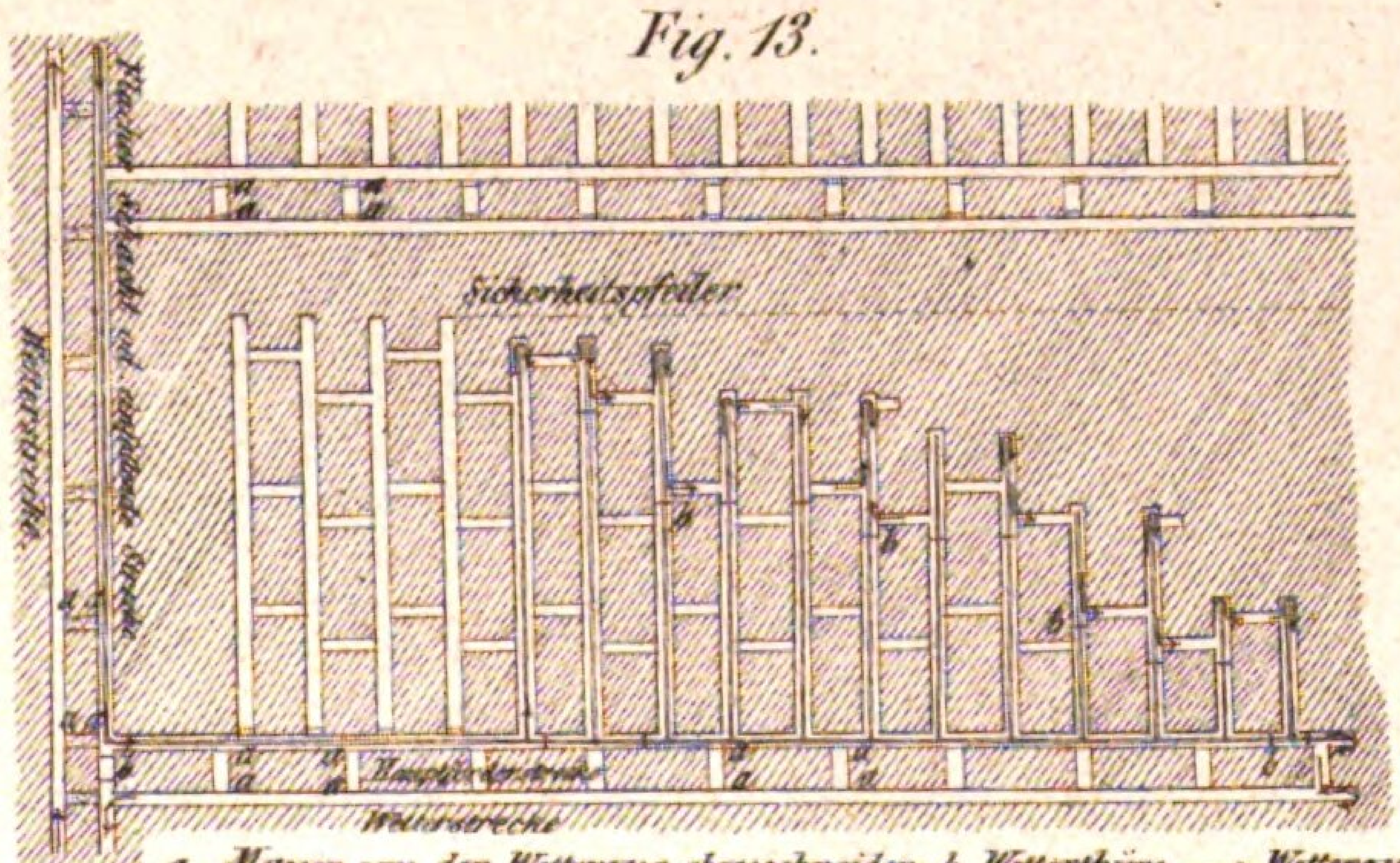


Fig. 13.



a. Mauer um den Wetterzug abzuschneiden. b. Wetterthüre. ⟶ Wetterzug.

Fig. 1.

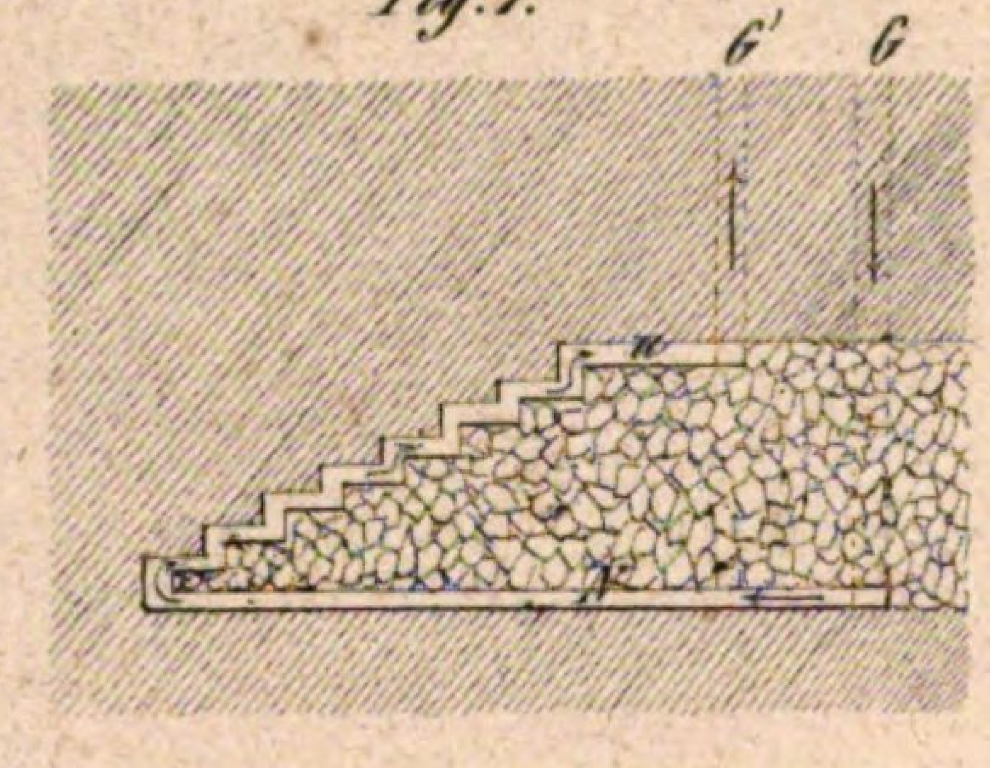
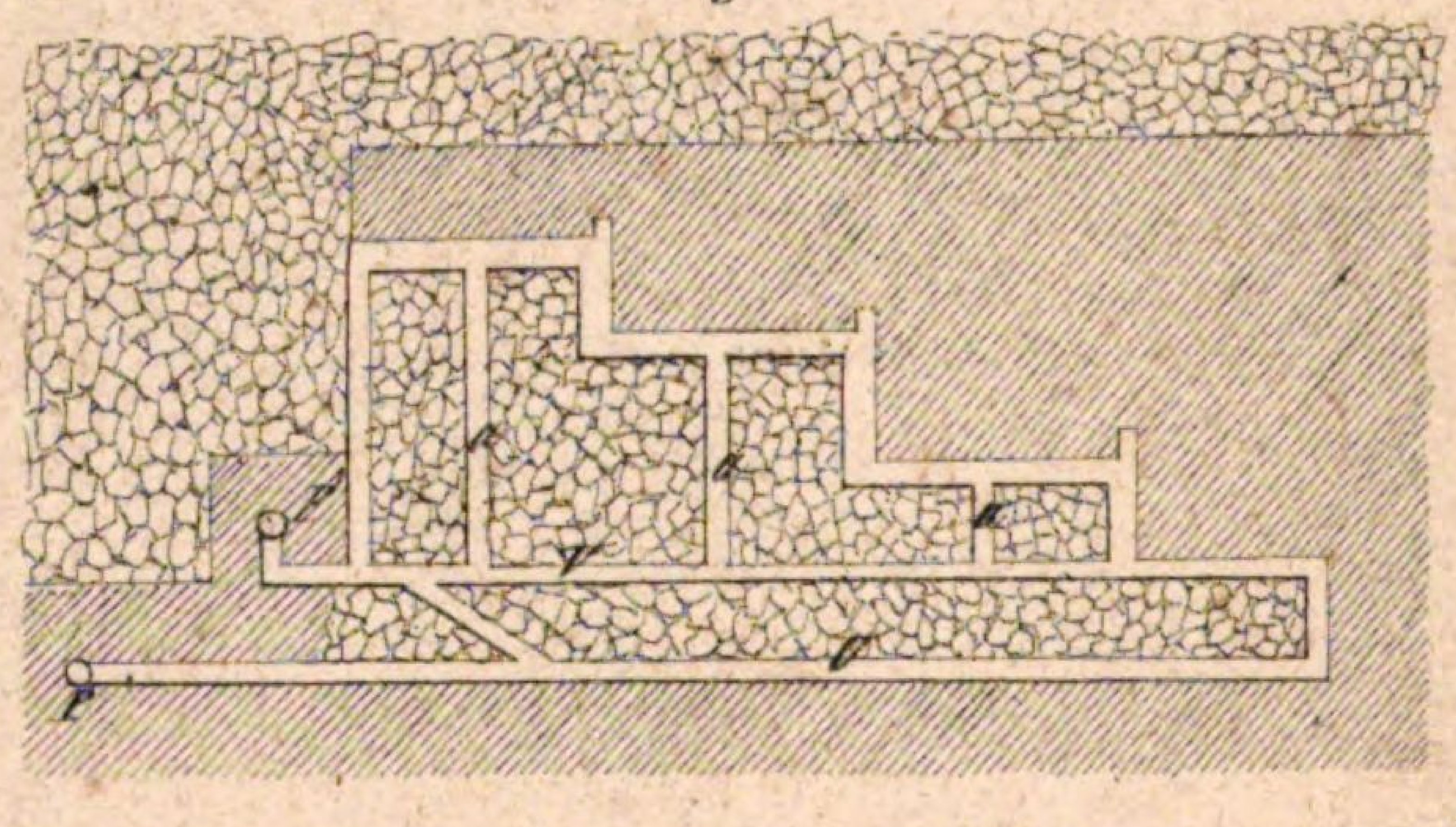


Fig. 2.



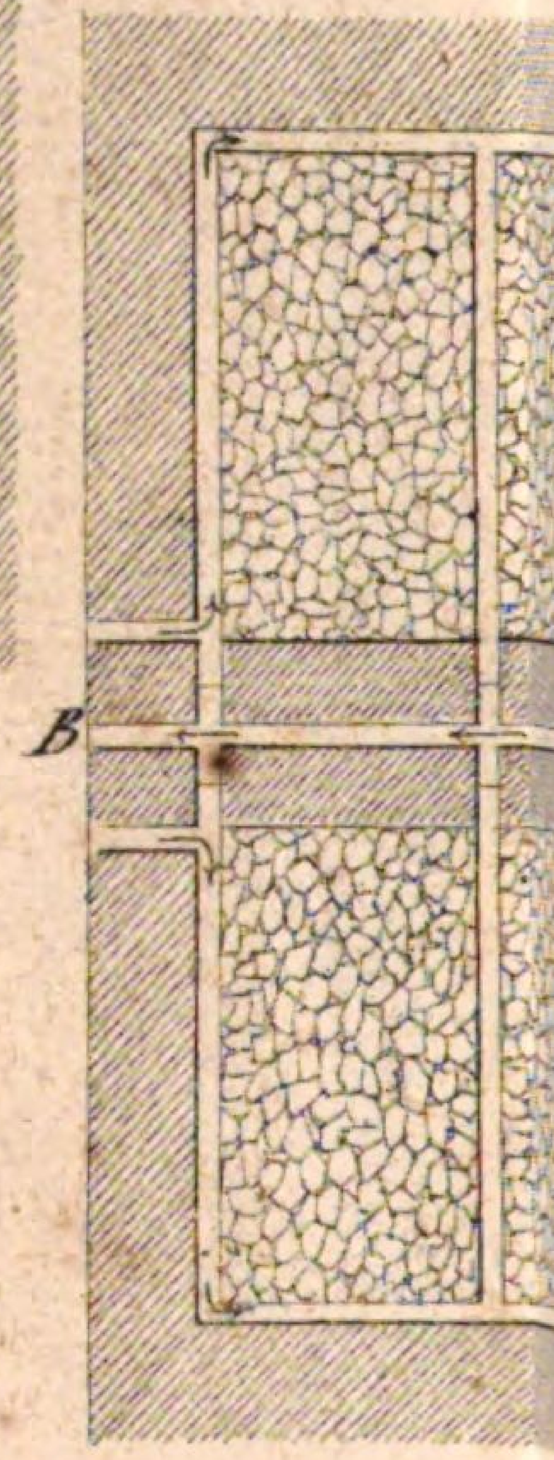


Fig. 4 (b)

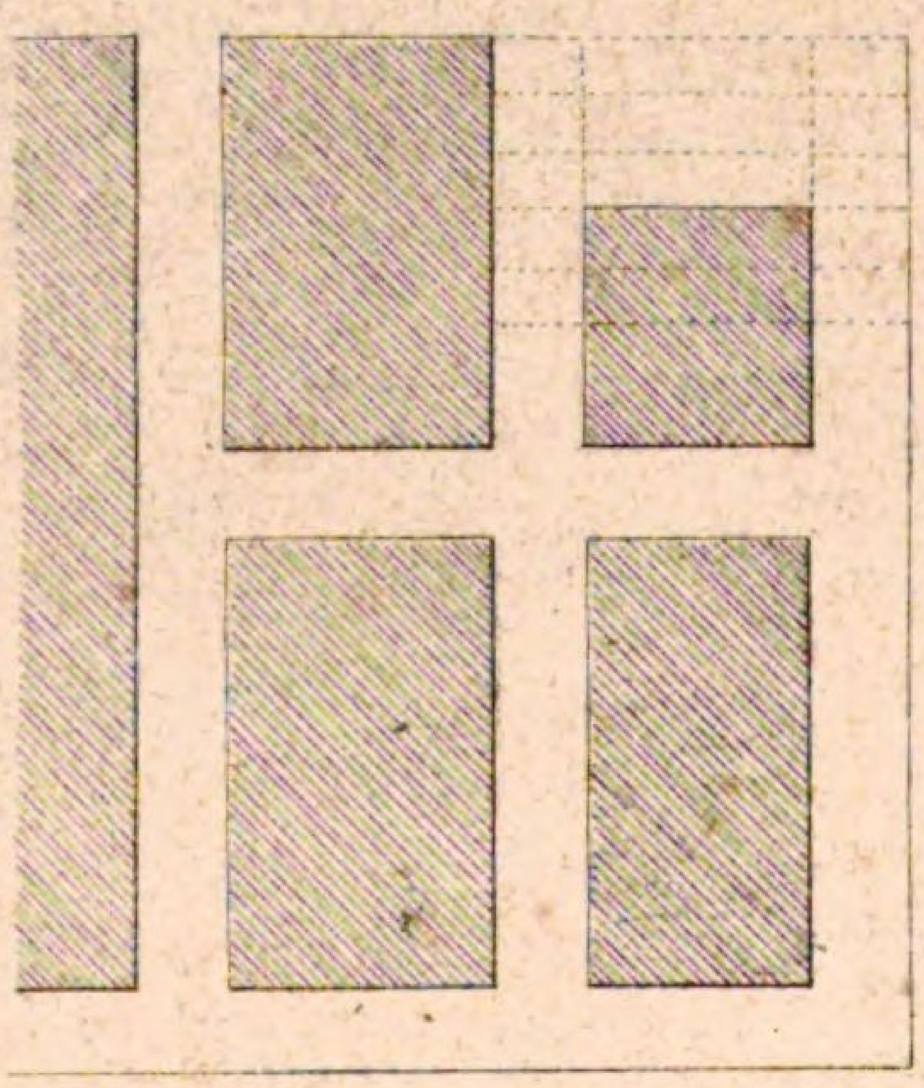


Fig. 4 (a)

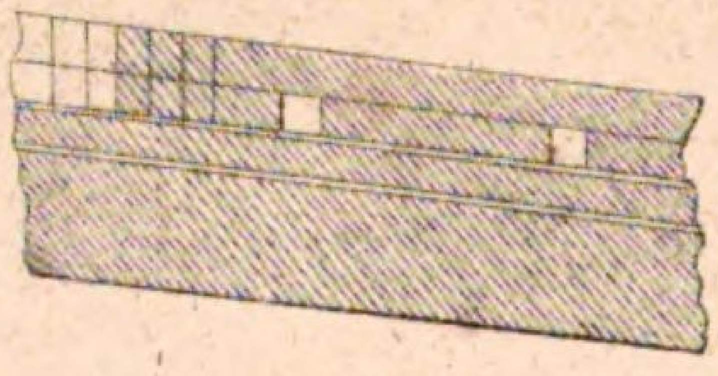
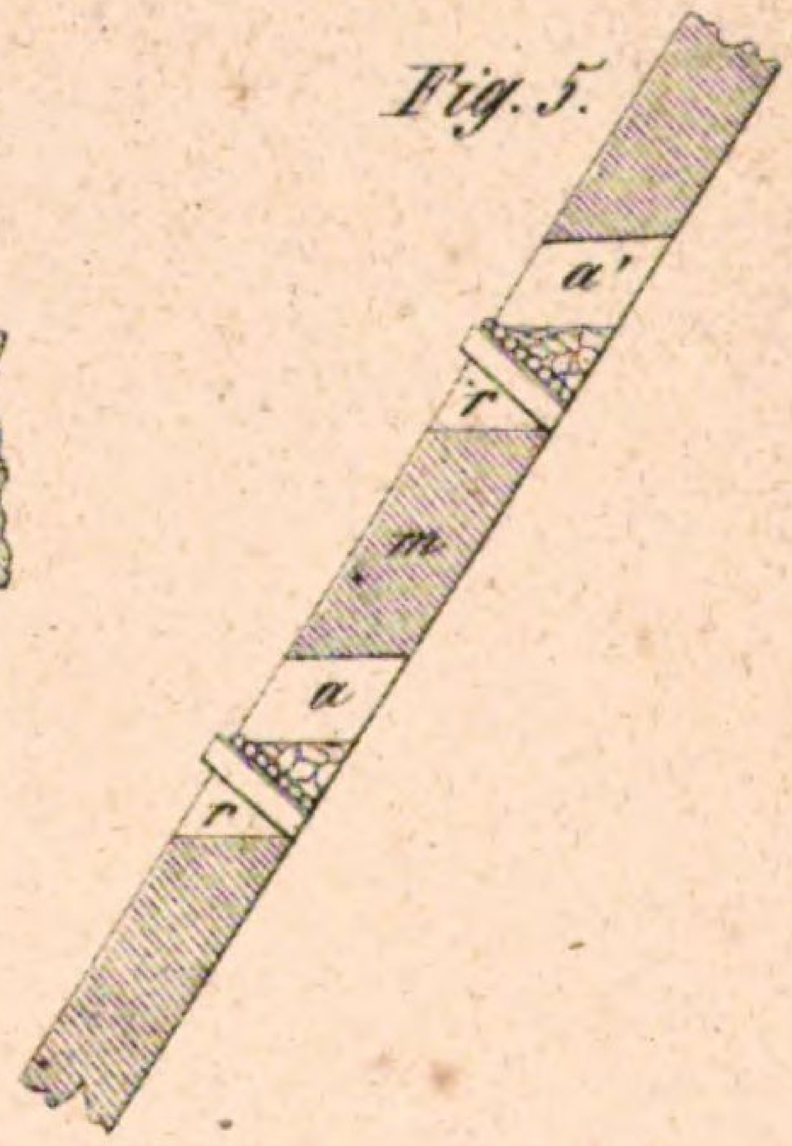


Fig. 5.



Maassstab der Fig. 4 (a) u. 4 (b).



Fig. 6.

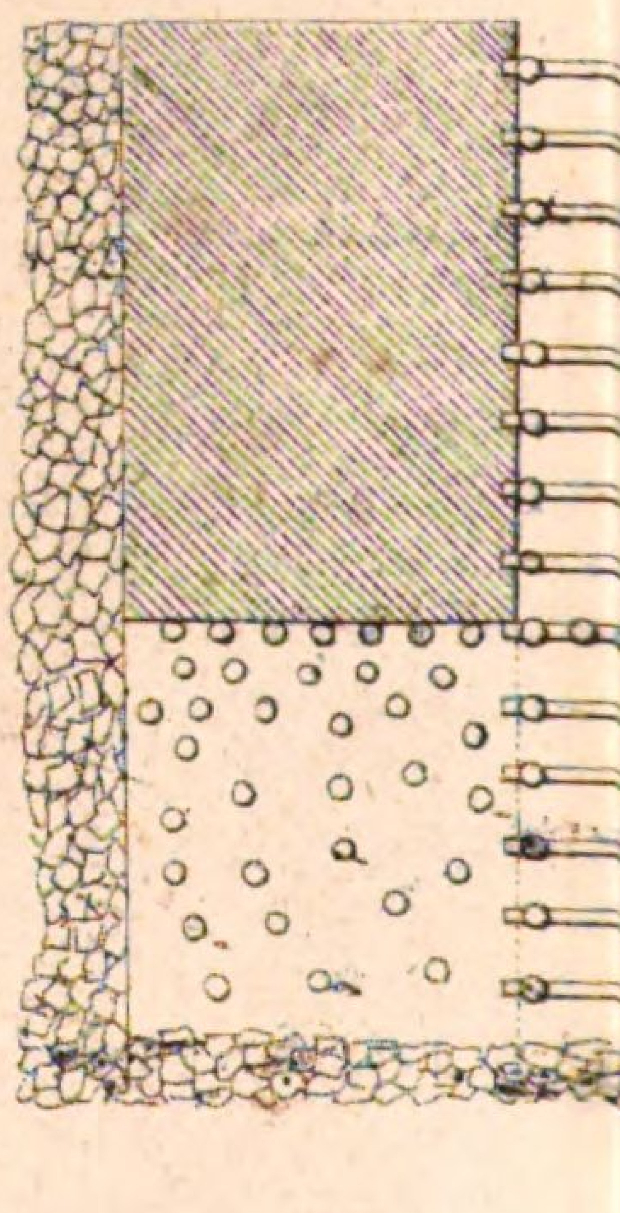


Fig. (c)

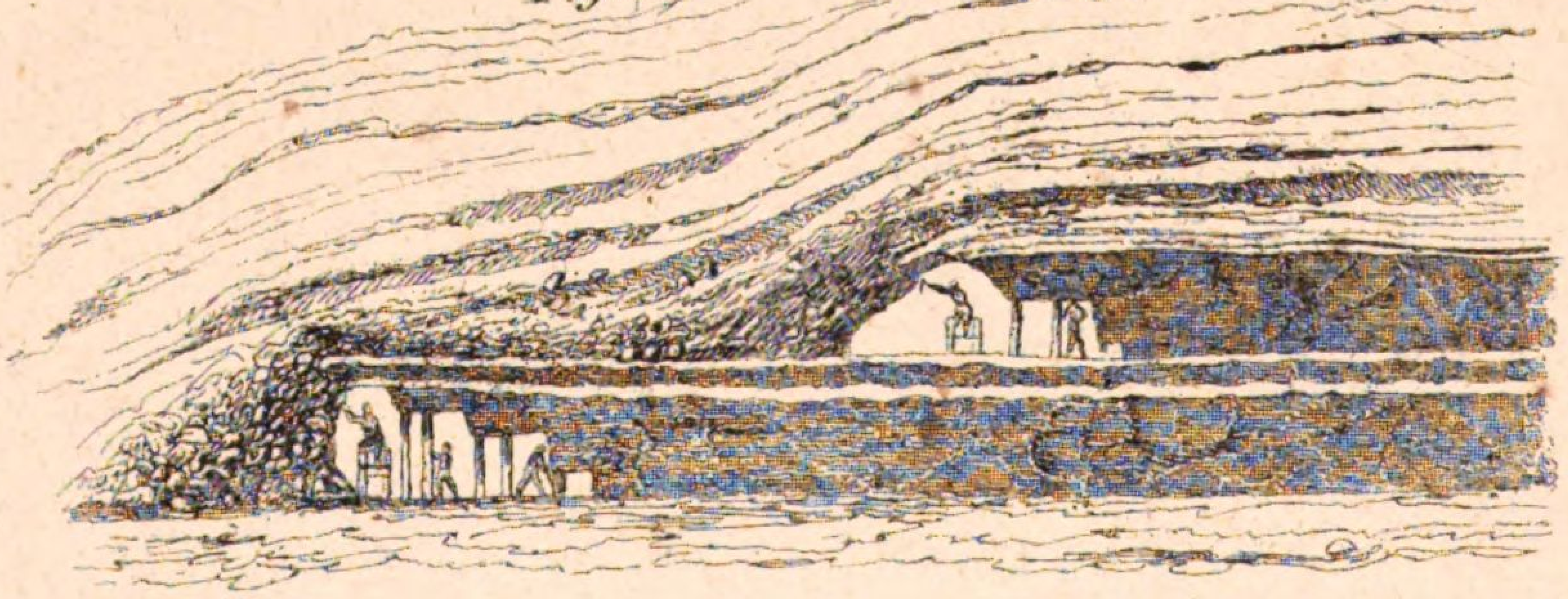


Fig. 3.

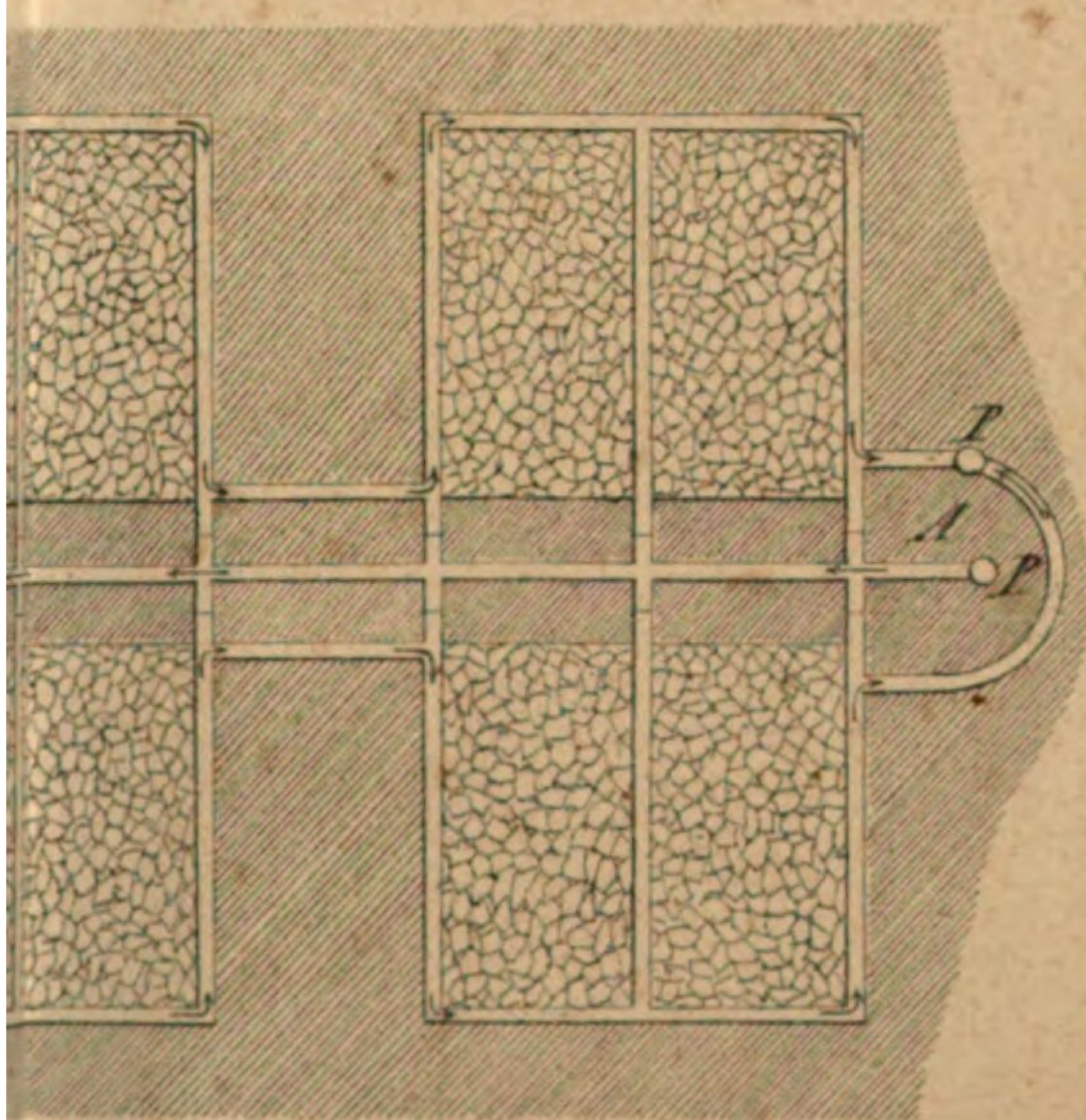


Fig. 3bis

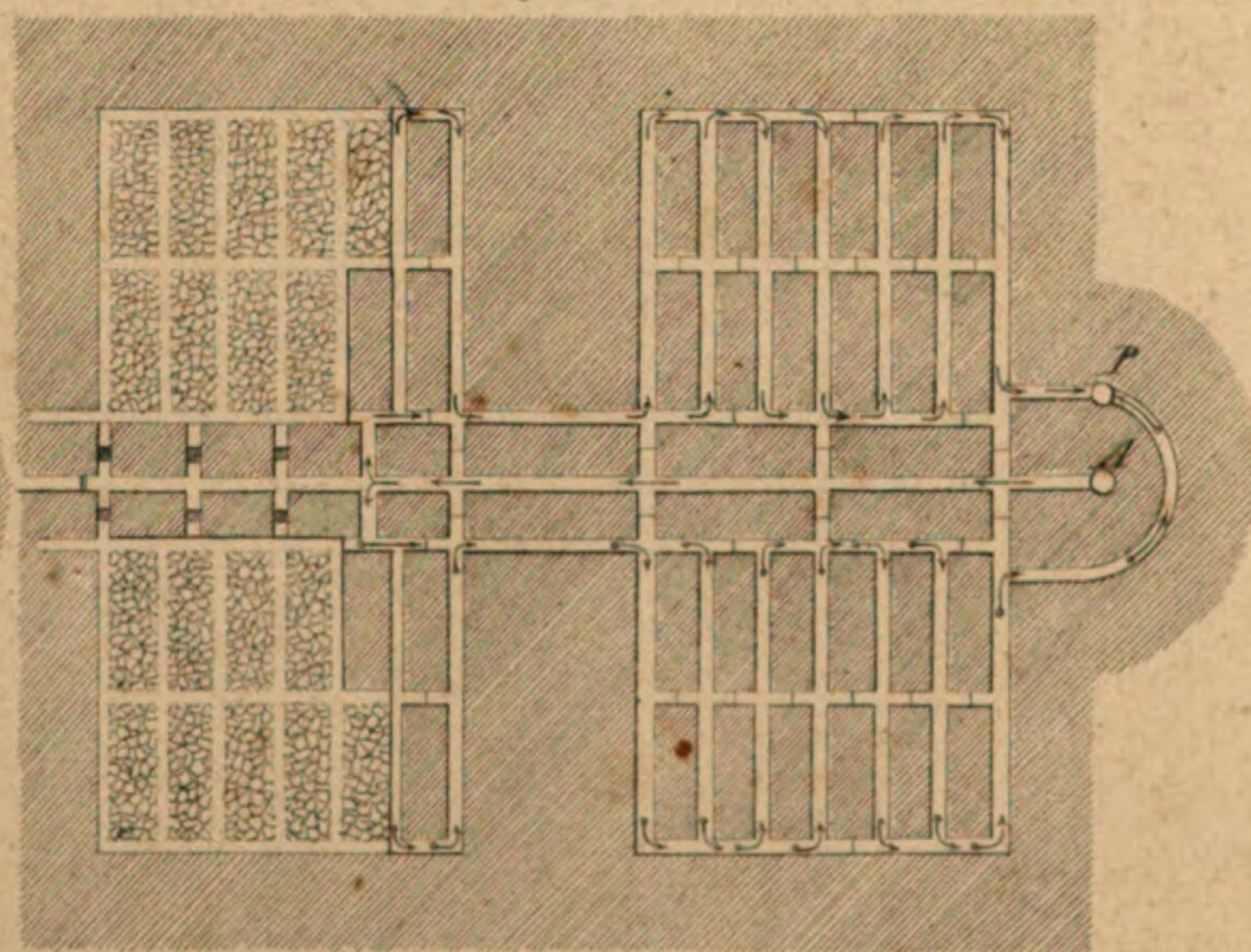
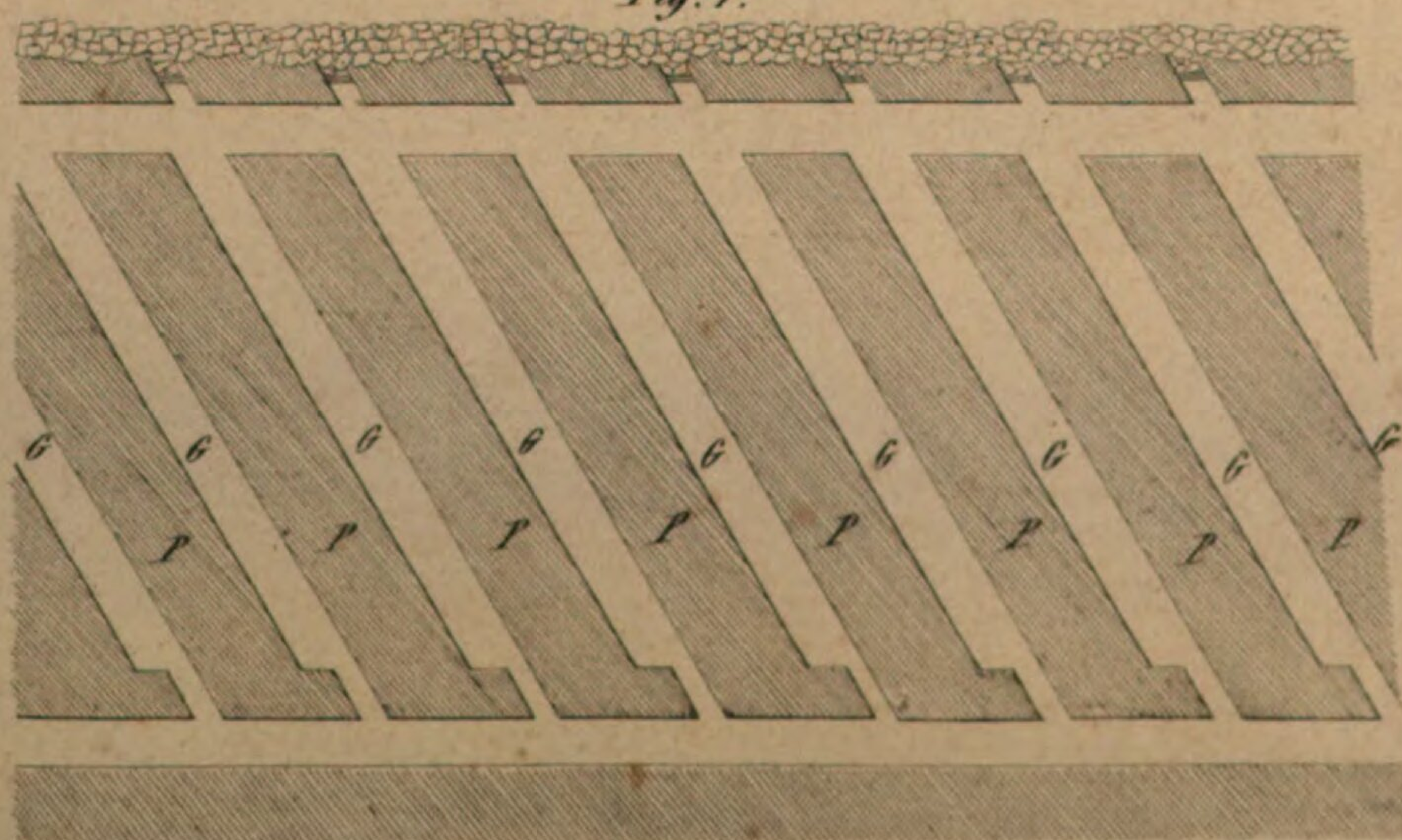
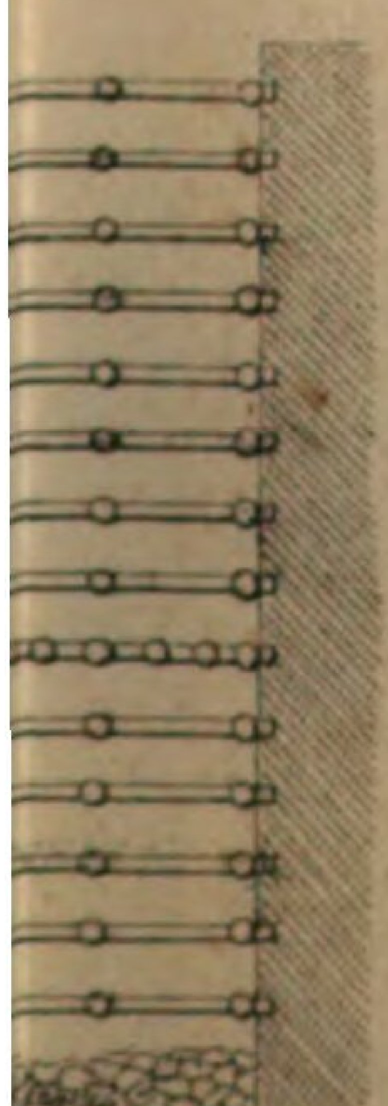


Fig. 4.



6.



Querbau.

Fig. 3.

Senkrechter Durchschnitt nach EF der Fig. 2.

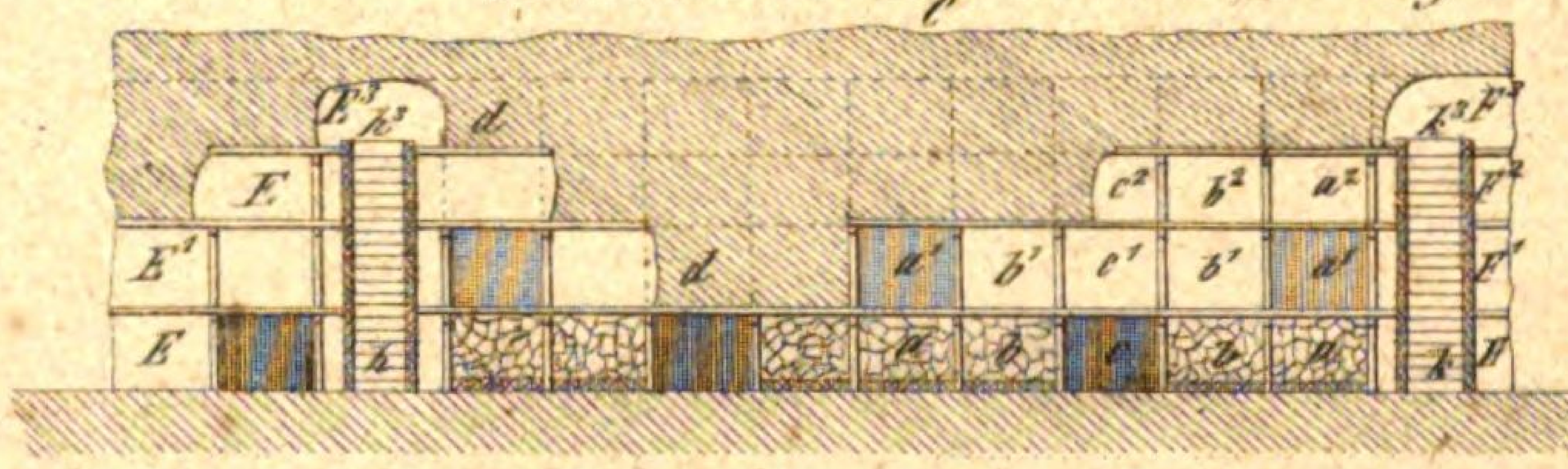
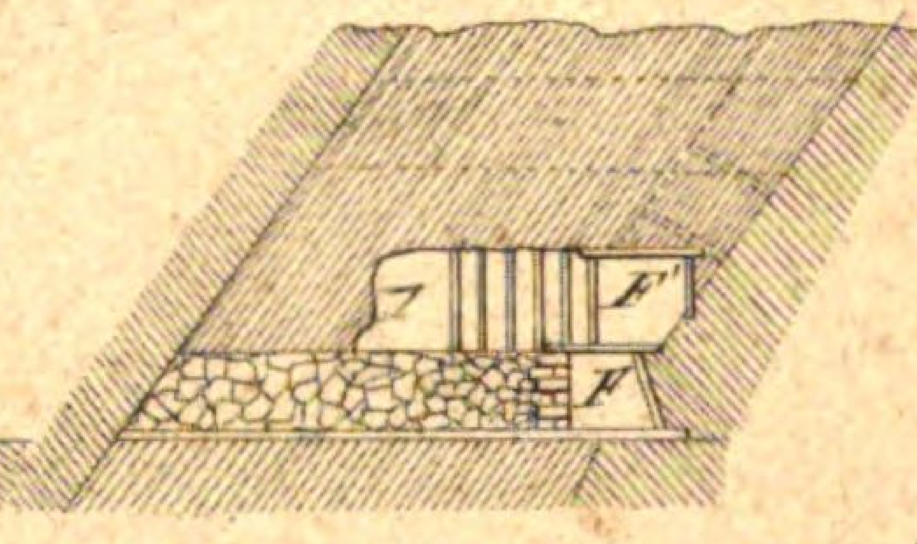
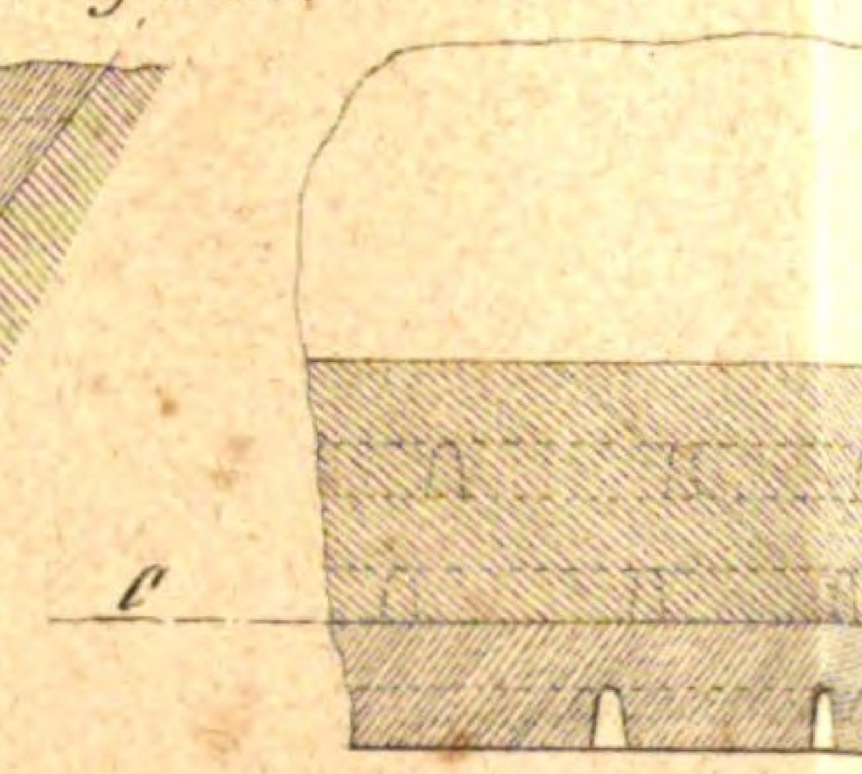


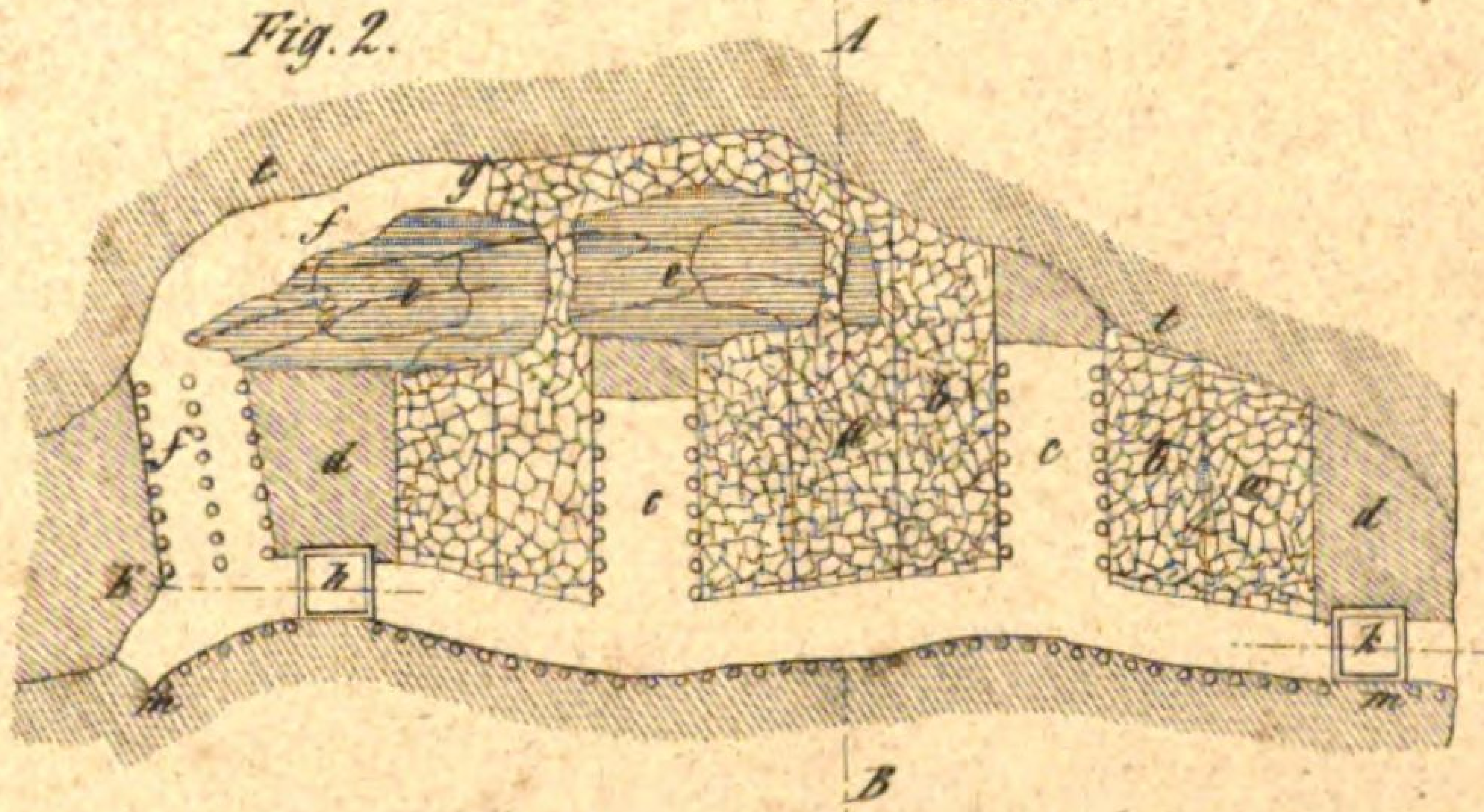
Fig. 1. *Senkrechter Durchschnitt nach AB, CD der Fig. 2 u. 3.*

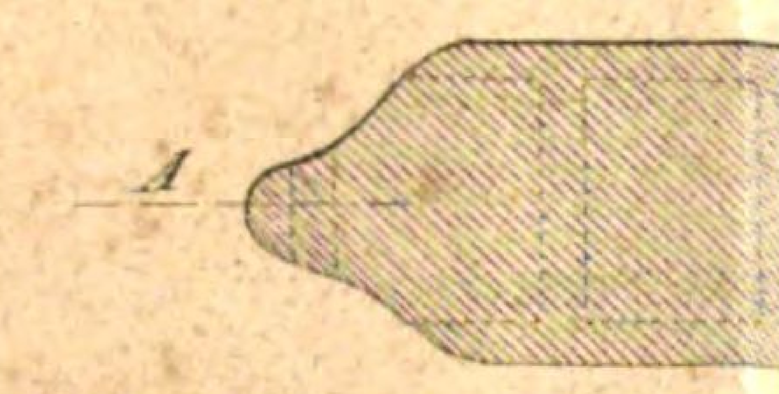




Grundriss.

Fig. 2.



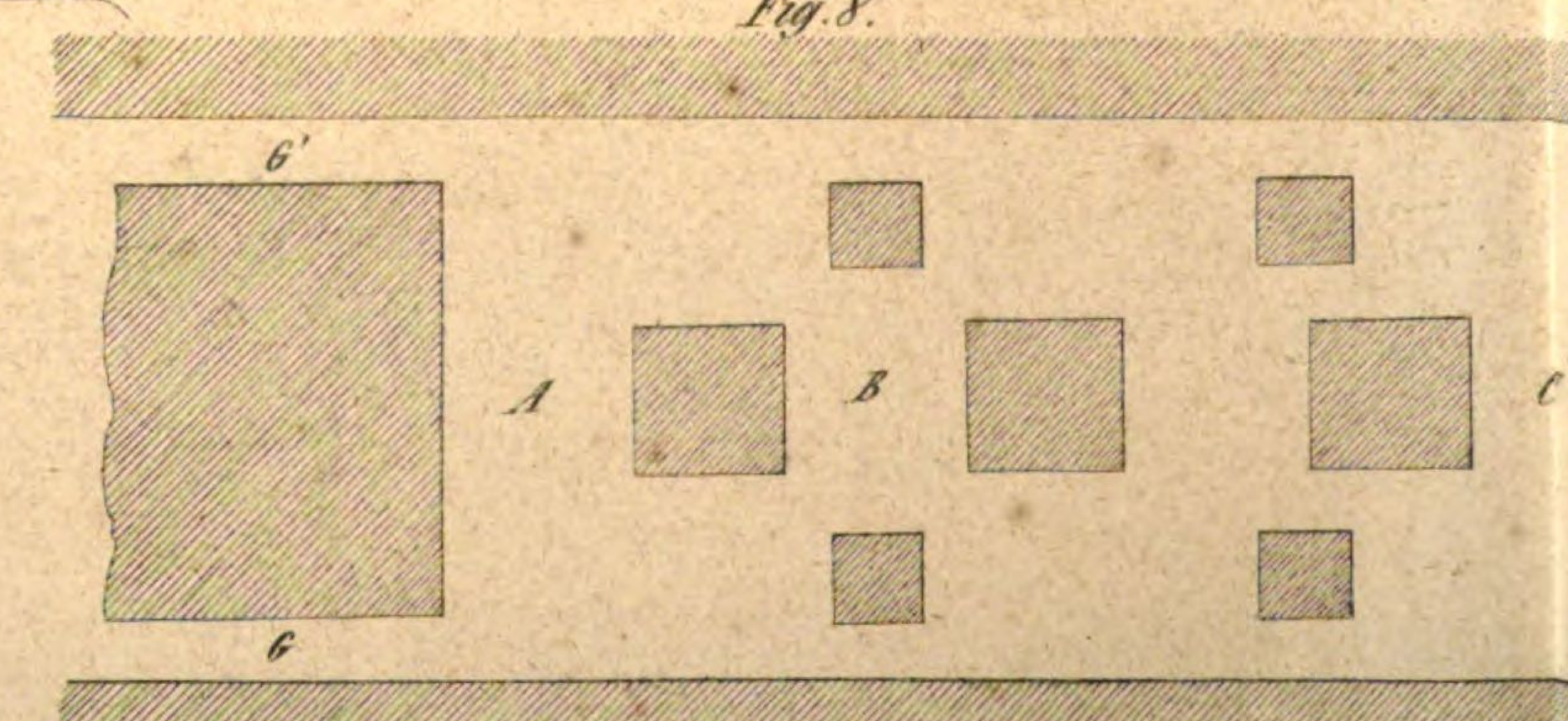


Steinkohlenflötz bei Dudley.

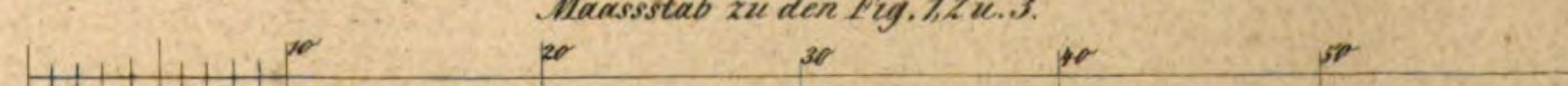
Fig. 7.



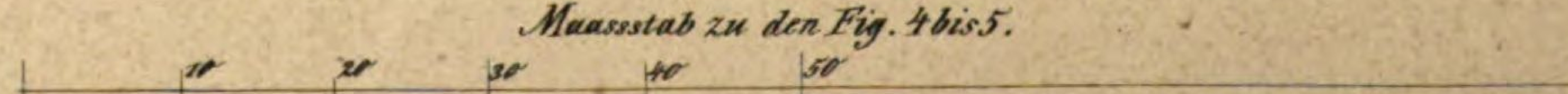
Fig. 8.



Maassstab zu den Fig. 1, 2 u. 3.



Maassstab zu den Fig. 4 bis 5.



Abbau des Anthracite der Mure.

Fig. 4. Senkrechter Duchschnitt nach A B der Fig. 6.

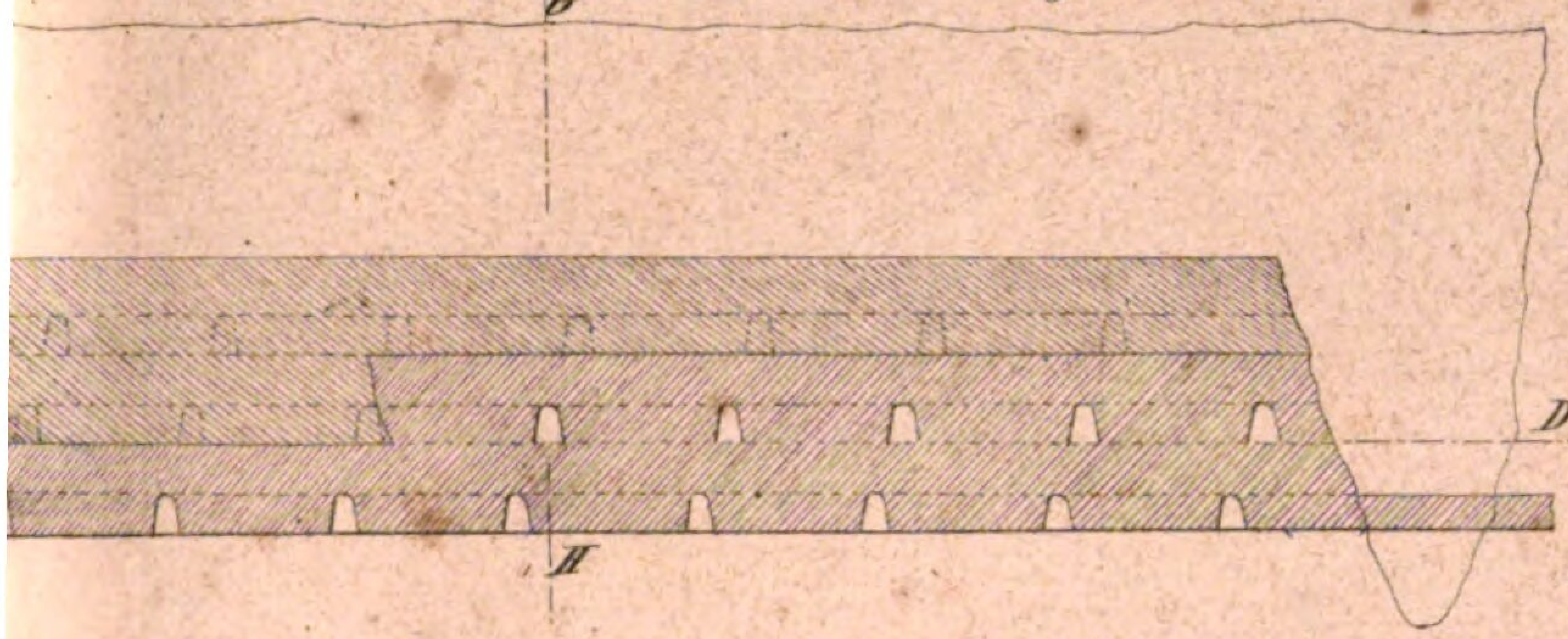


Fig. 5. Senkrechter Durchschnitt GH, IK der Fig. 4 u. 6.

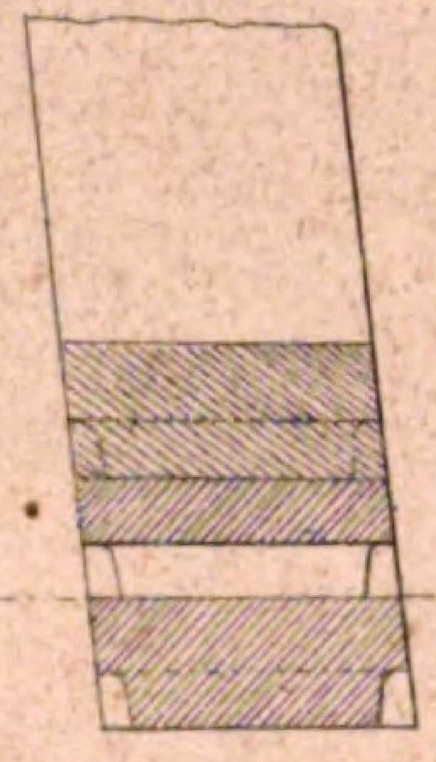
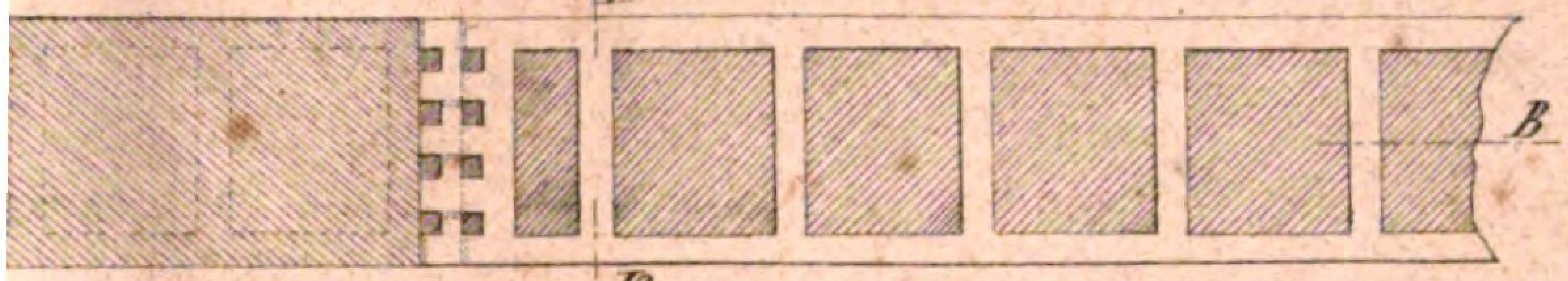
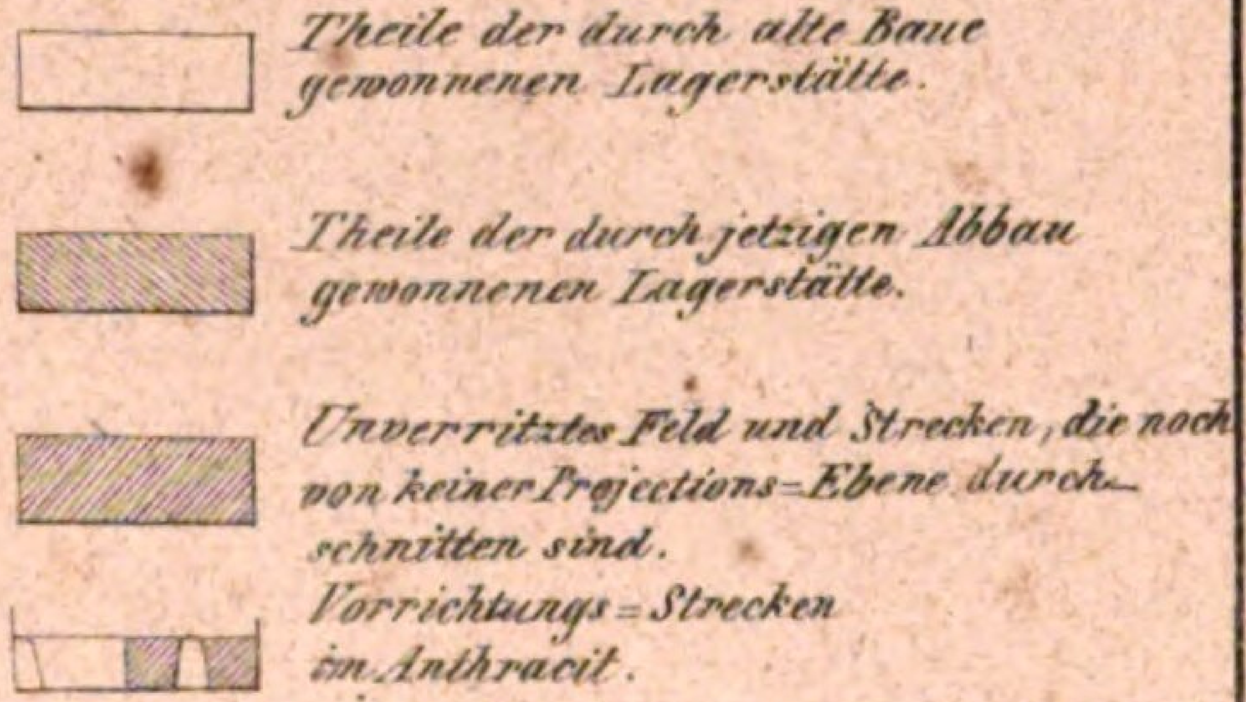


Fig. 6. Horizontaler Durchschnitt nach CD, EF der Fig. 4 u. 5.



Erklärung.

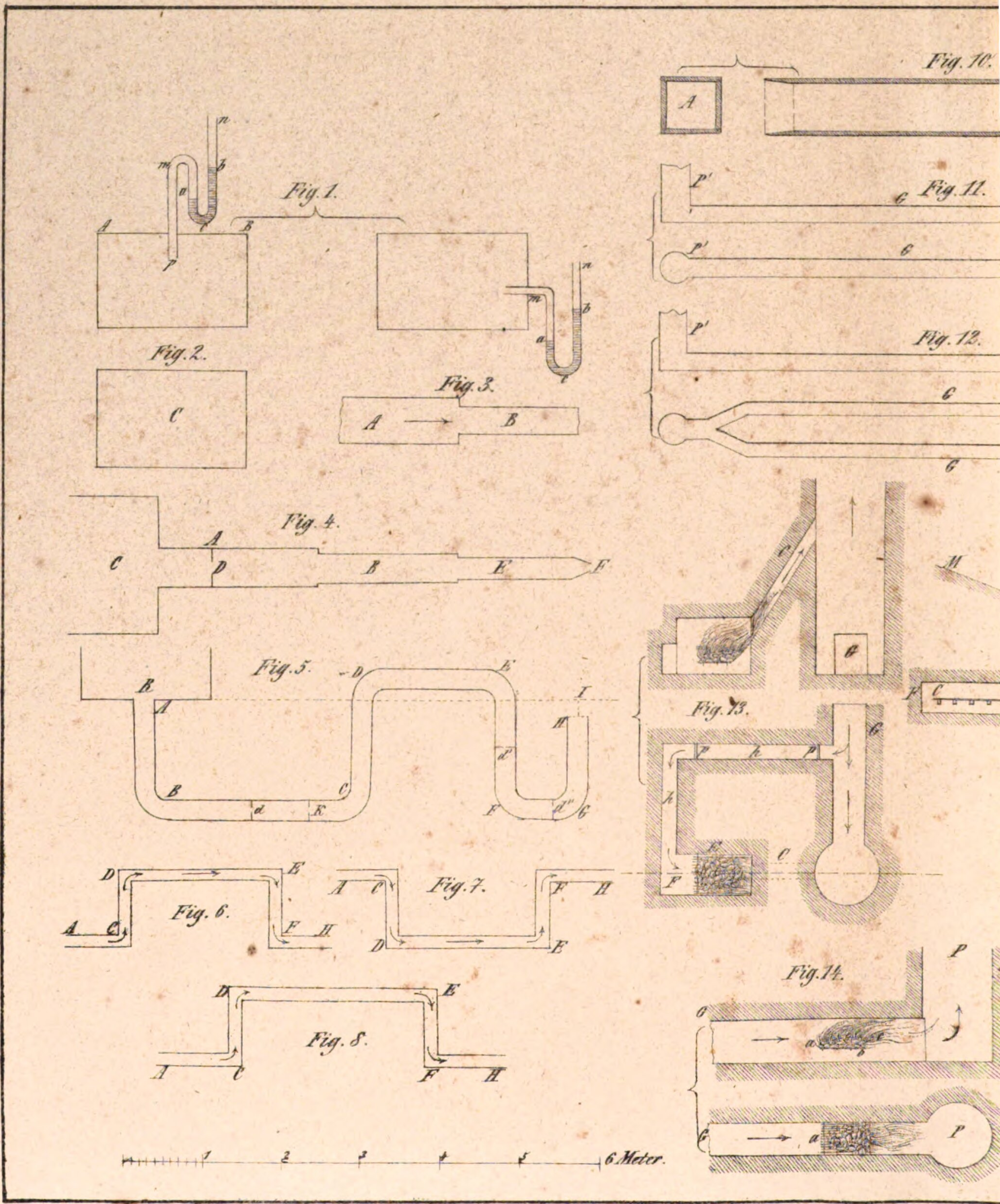


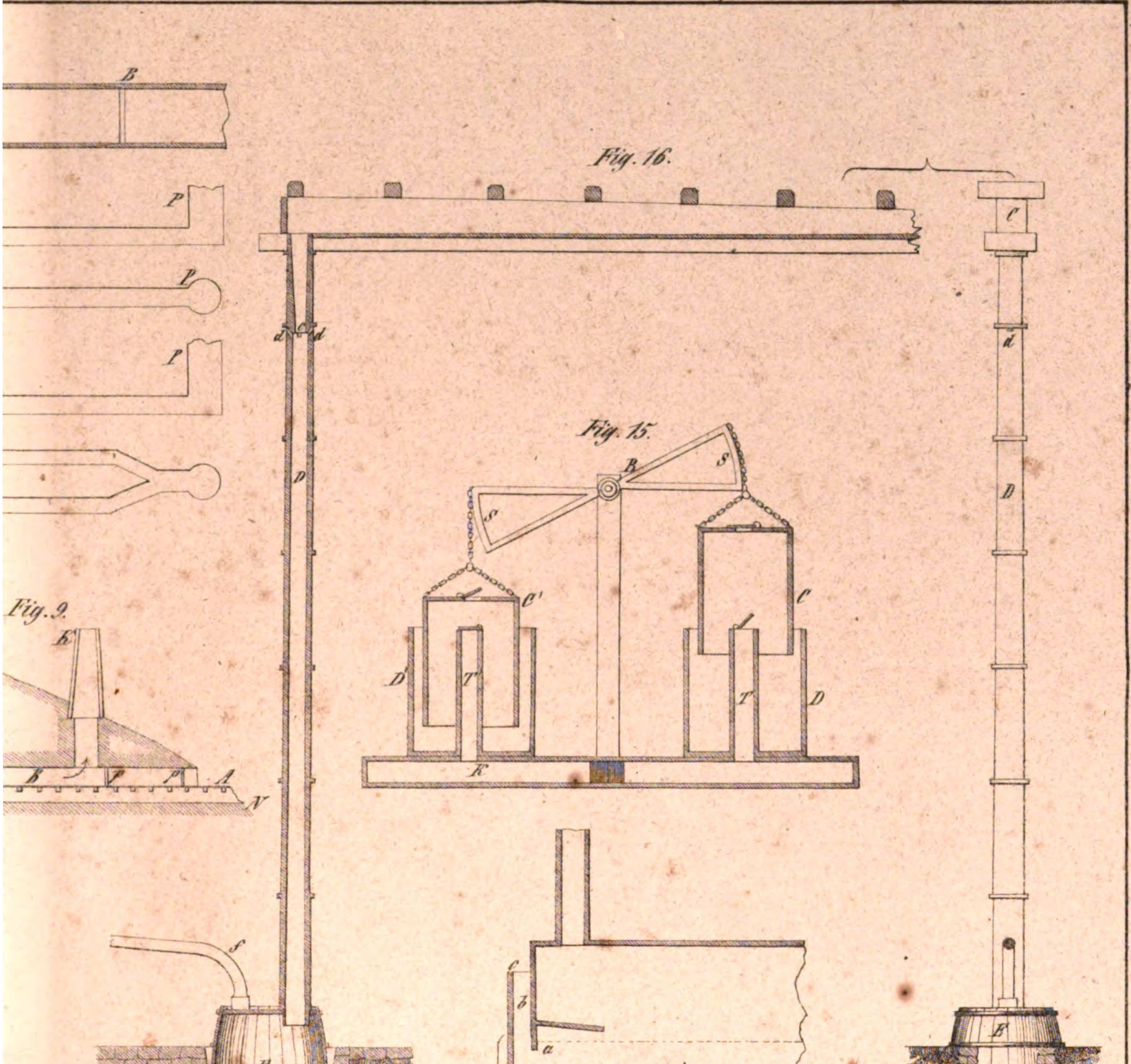


Quecksilber=Bergwerk zu Almaden.

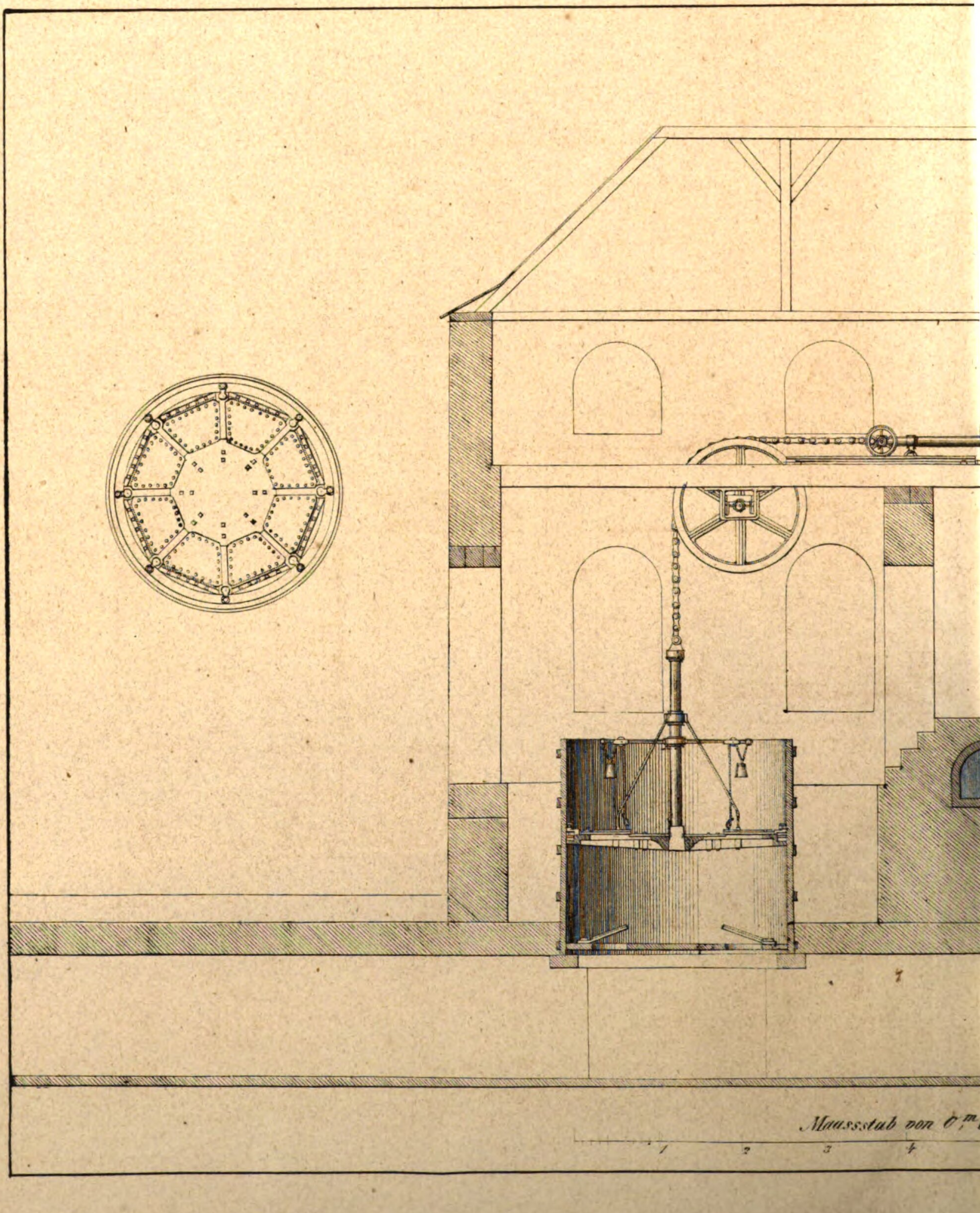


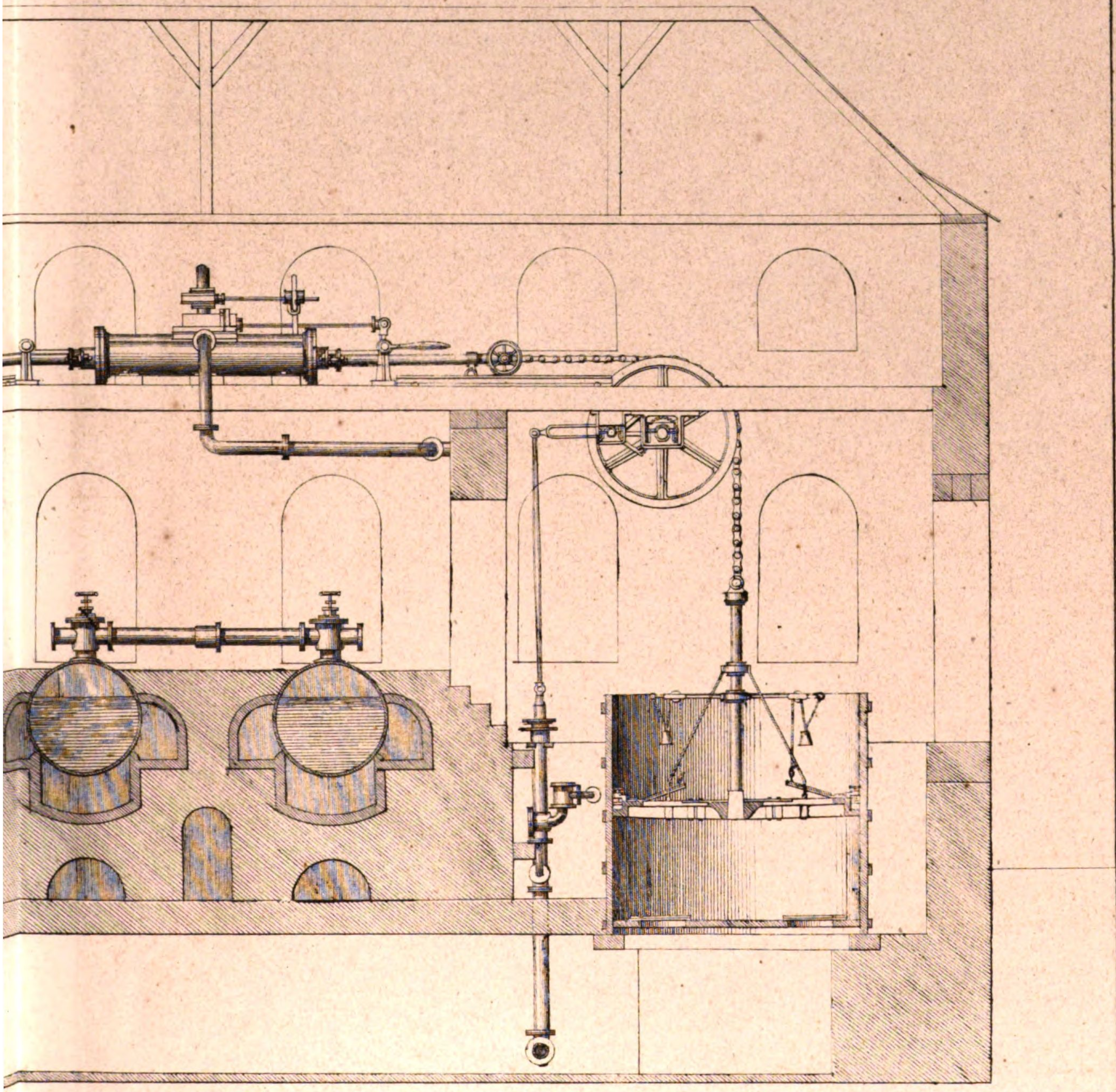
Fig. 9.


Fig. 1.
Fig. 2.
Fig. 3.
Fig. 4.
Fig. 5.
Fig. 6.
Fig. 7.
Fig. 8.
Fig. 10.
Fig. 11.
Fig. 12.
Fig. 13.
Fig. 14.
1 2 3 4 5 6 Meter


Fig. 9.
Fig. 16.
Fig. 15.
Fig. 17.

Wettermaschine der Grande Ve

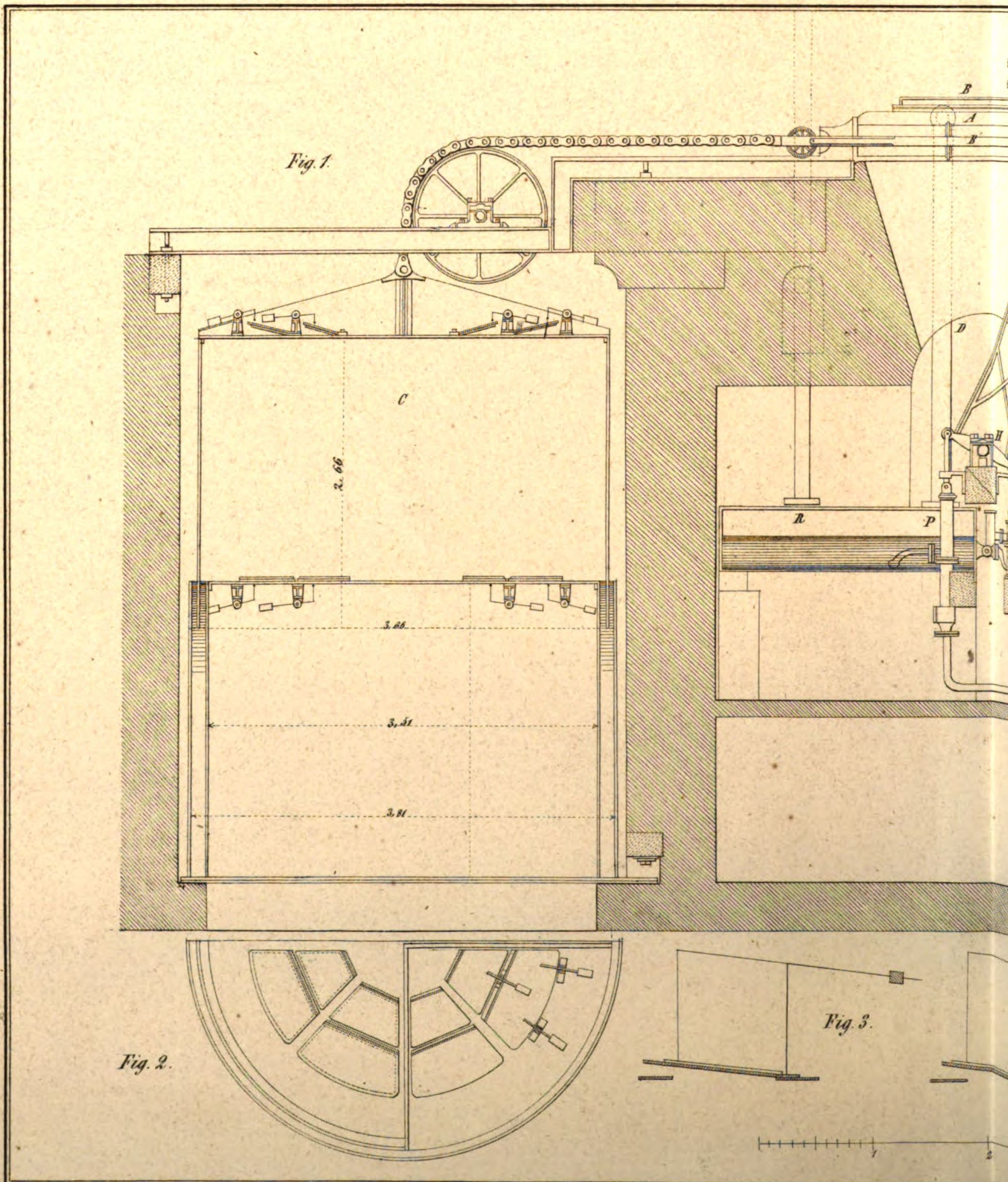


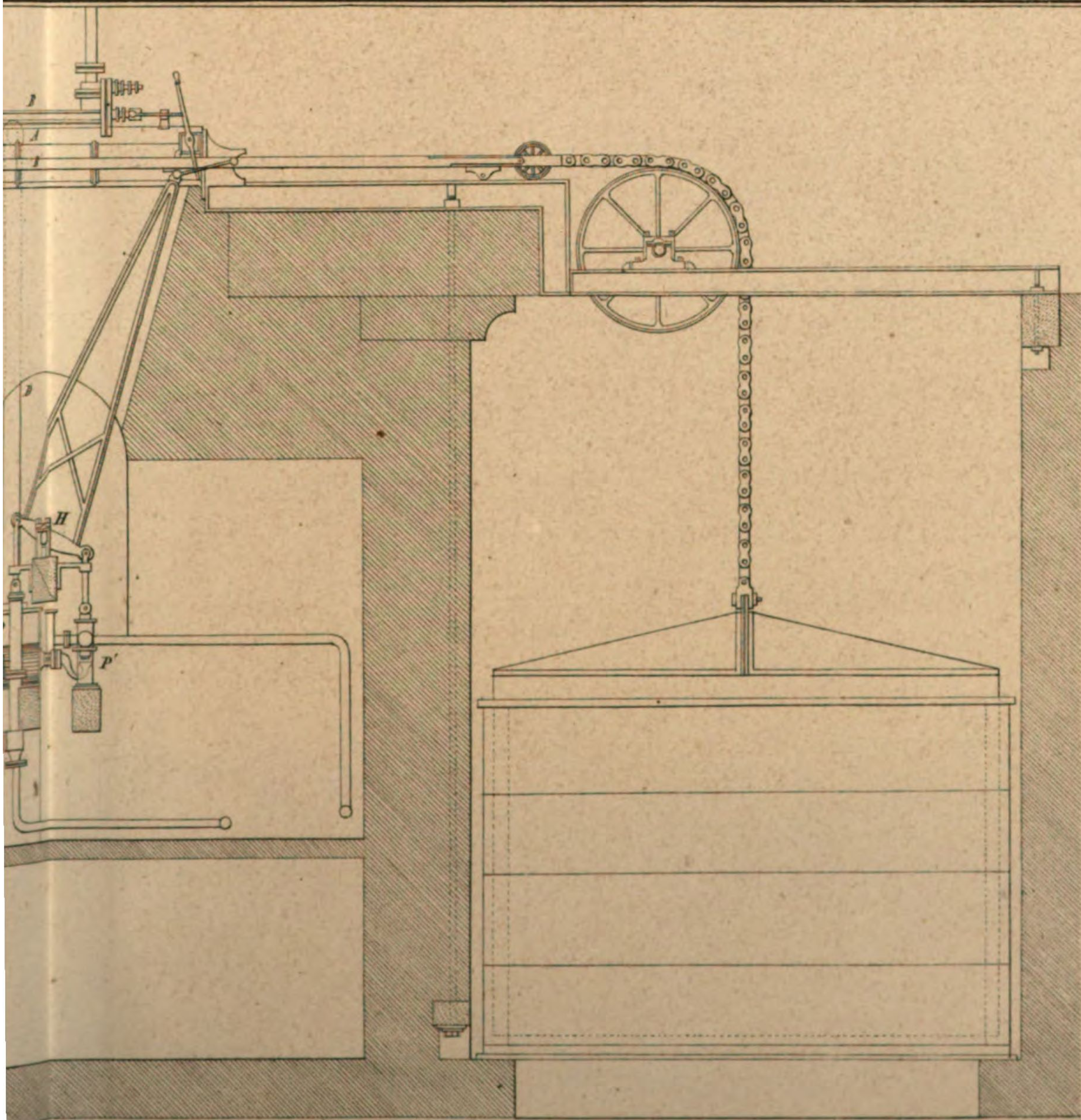


...5 auf das Meter.

5 10 mètres

Wettermaschine der Grube





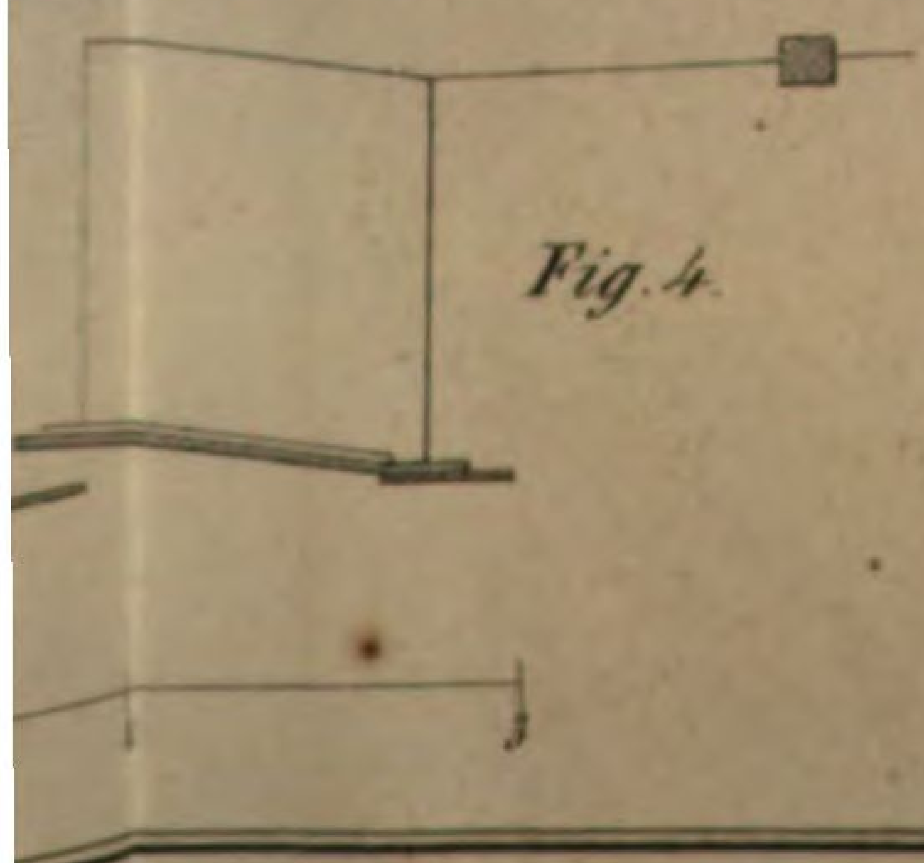
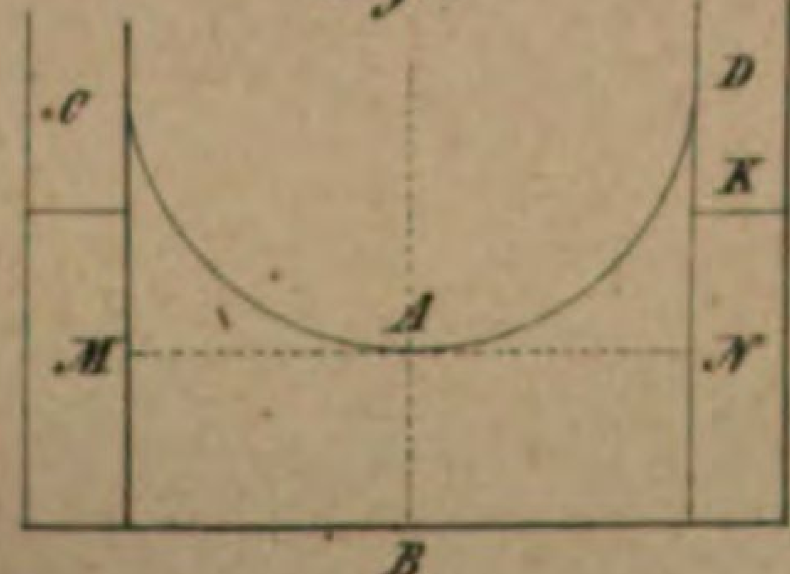


Fig. 4.

Fig. 5.



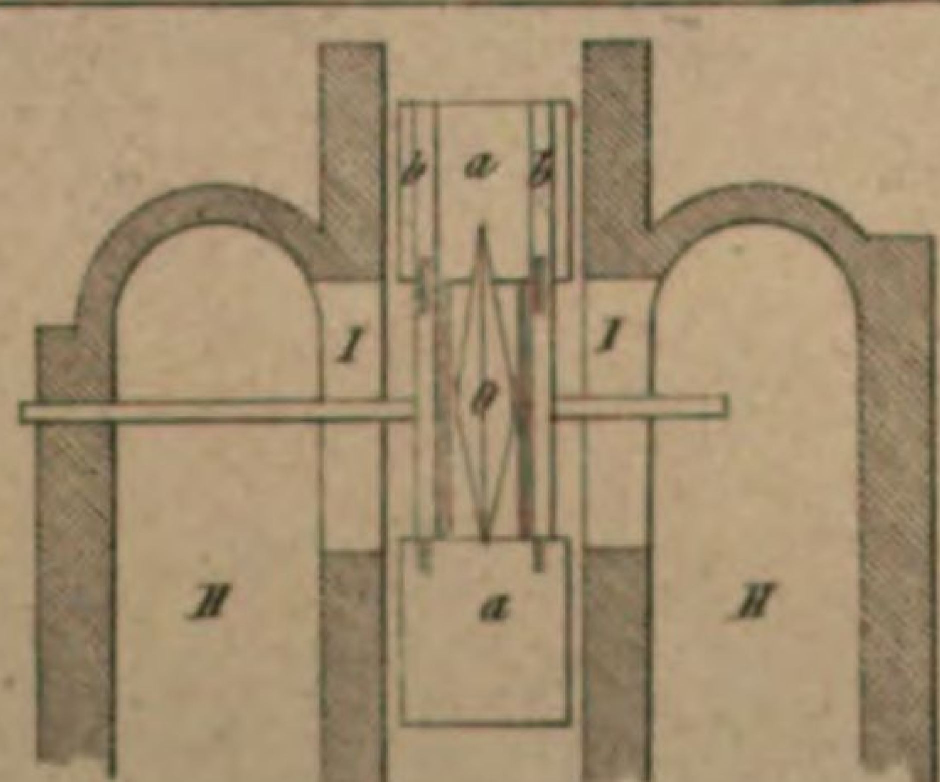
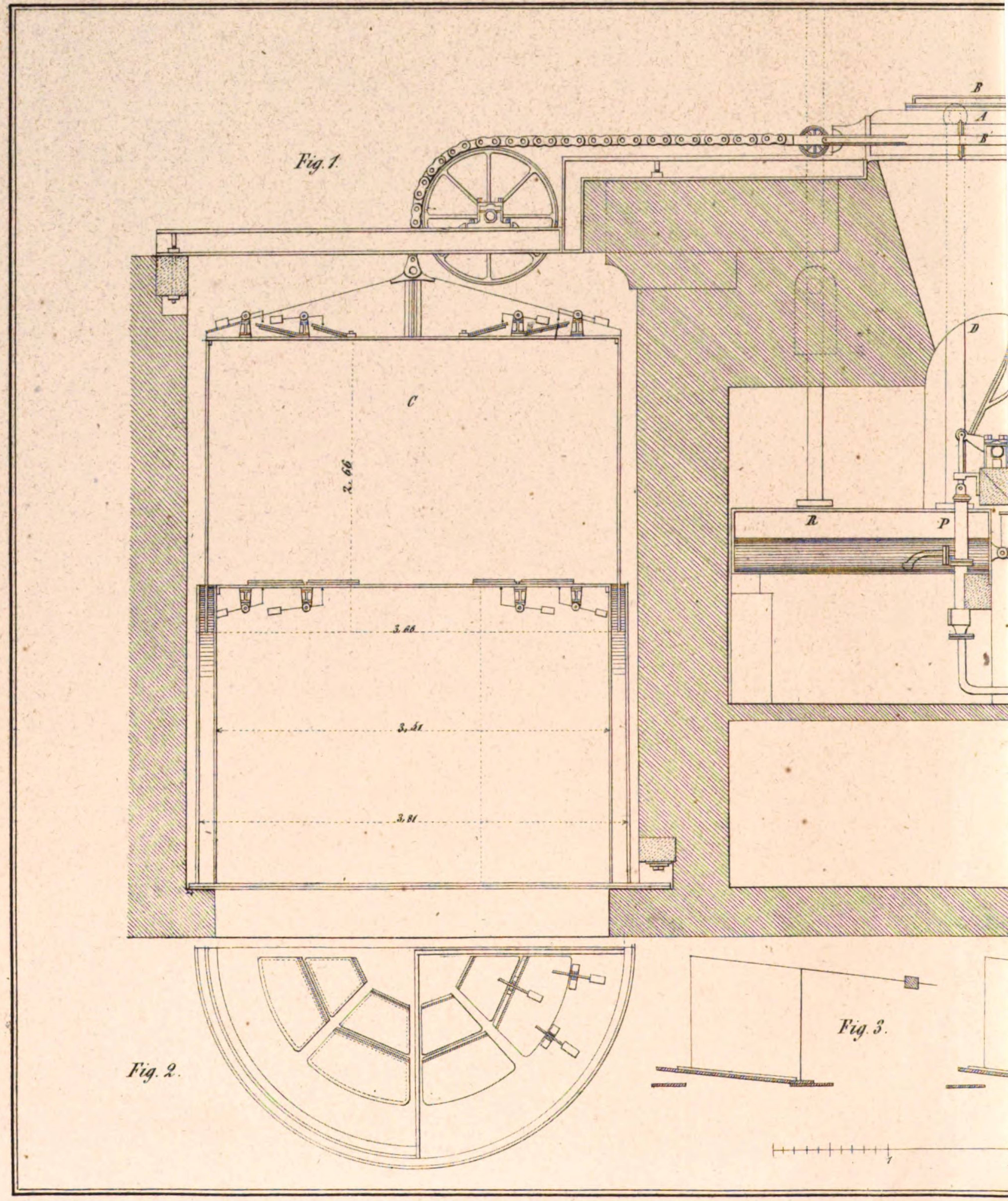
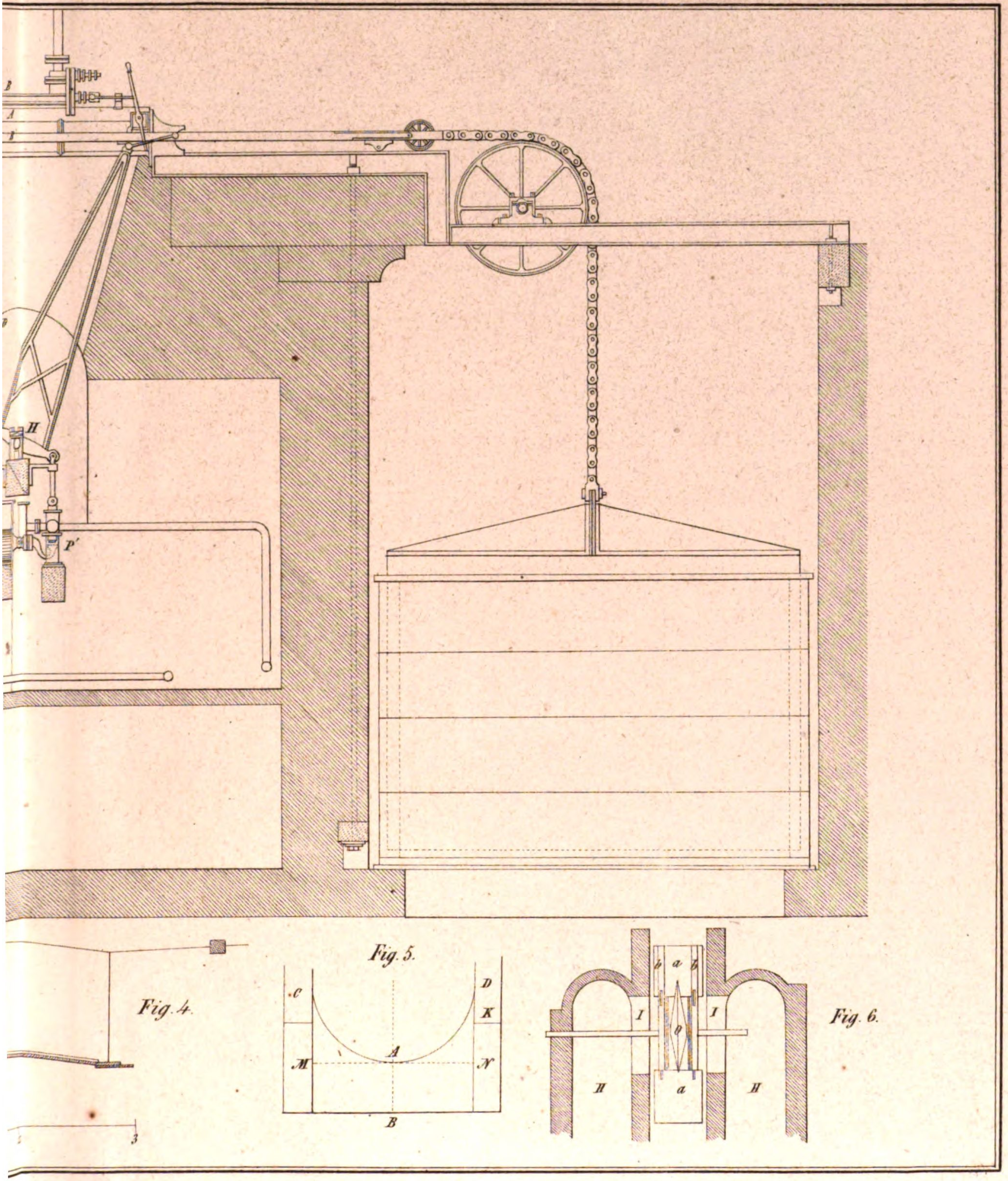


Fig. 6.

Wettermaschine der Gru

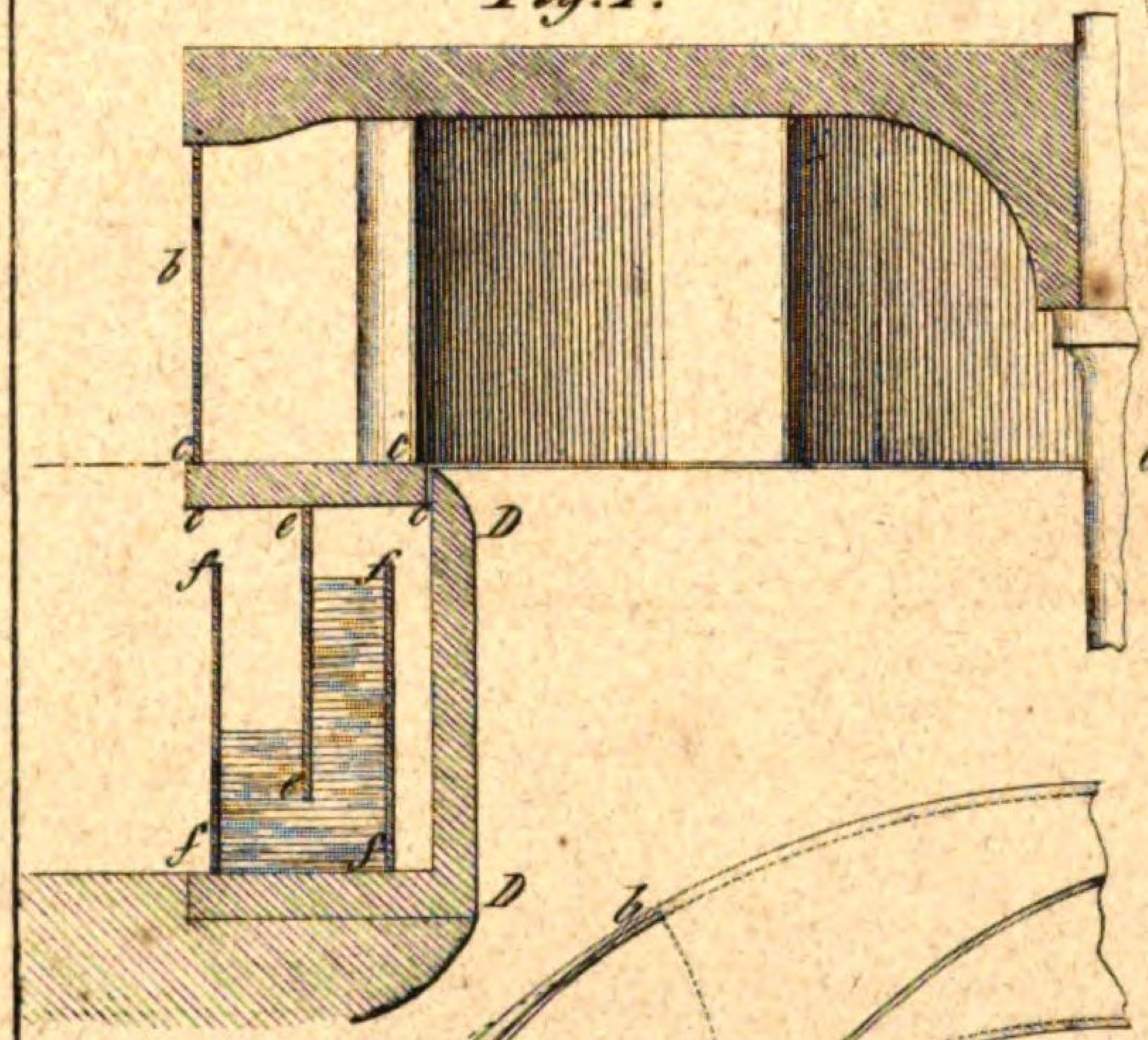



B
A
B
H
P'
Fig. 4.
3
Fig. 5.
C
D
K
A
M
N
B
b
a
b
I
I
b
H
a
H
Fig. 6.

Saugende Ventilatoren u.

Saugender Ventilator, der sich um eine senkrechte Axe dreht.

Fig. 1.



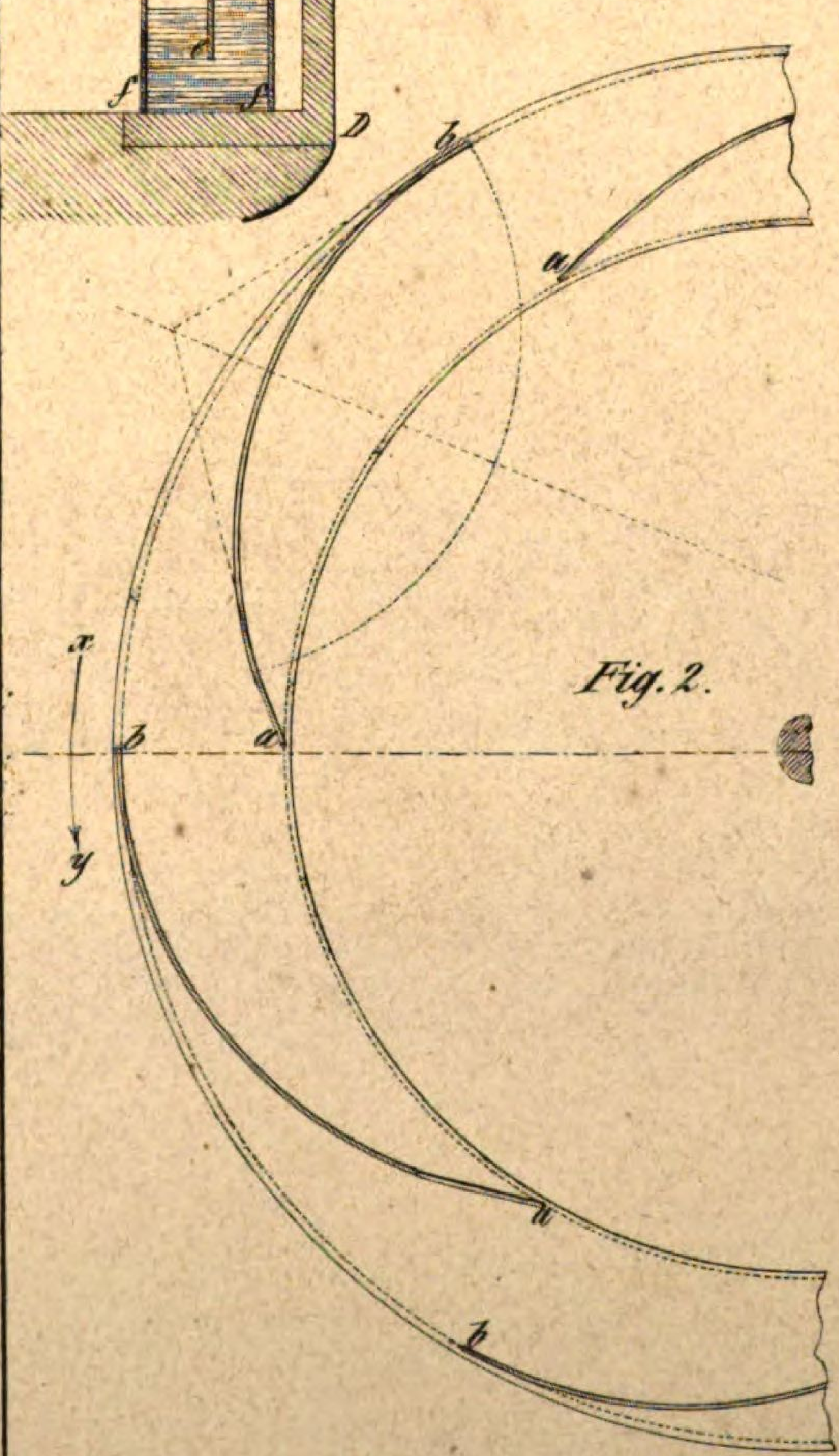
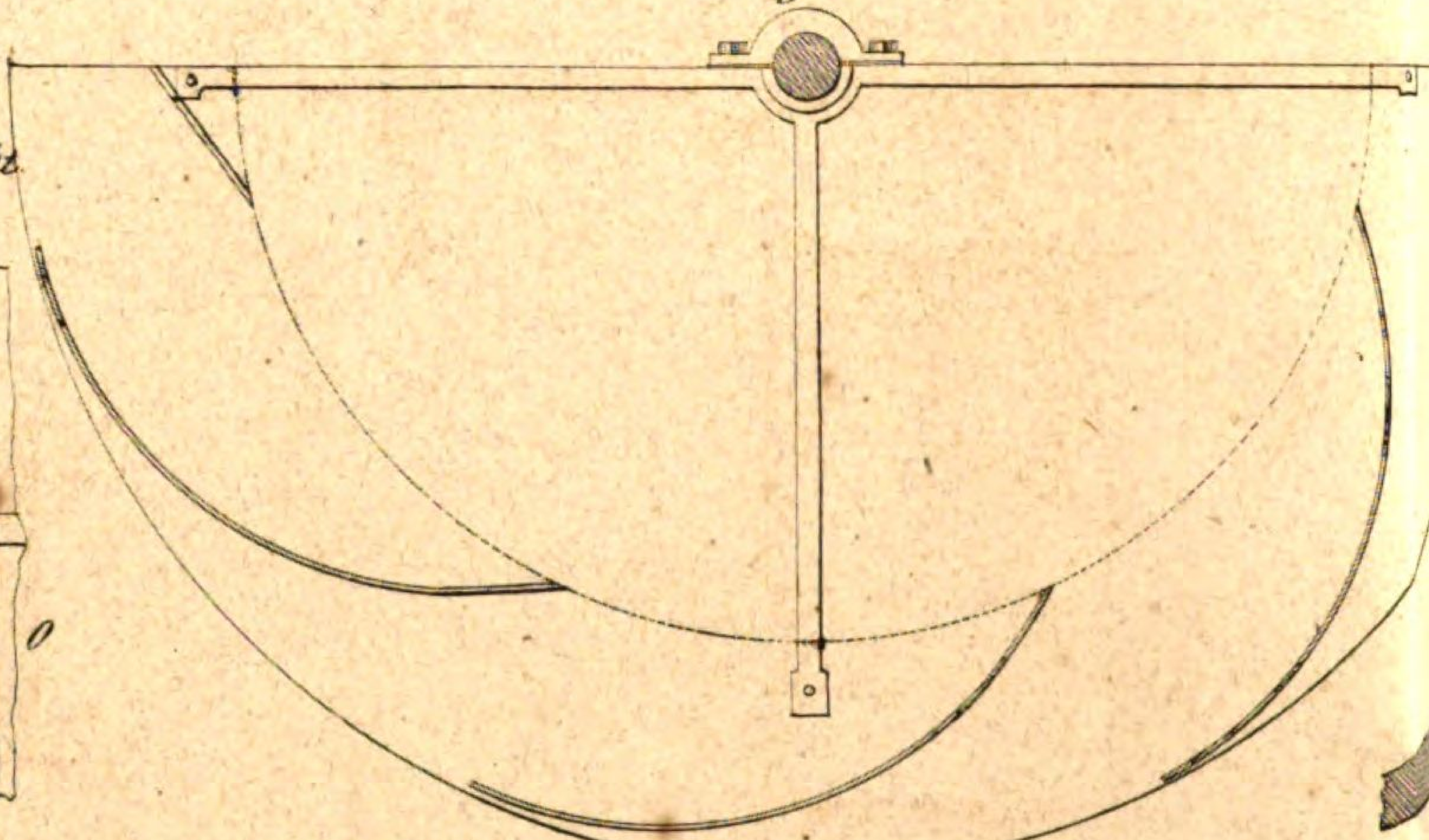


Fig. 2.

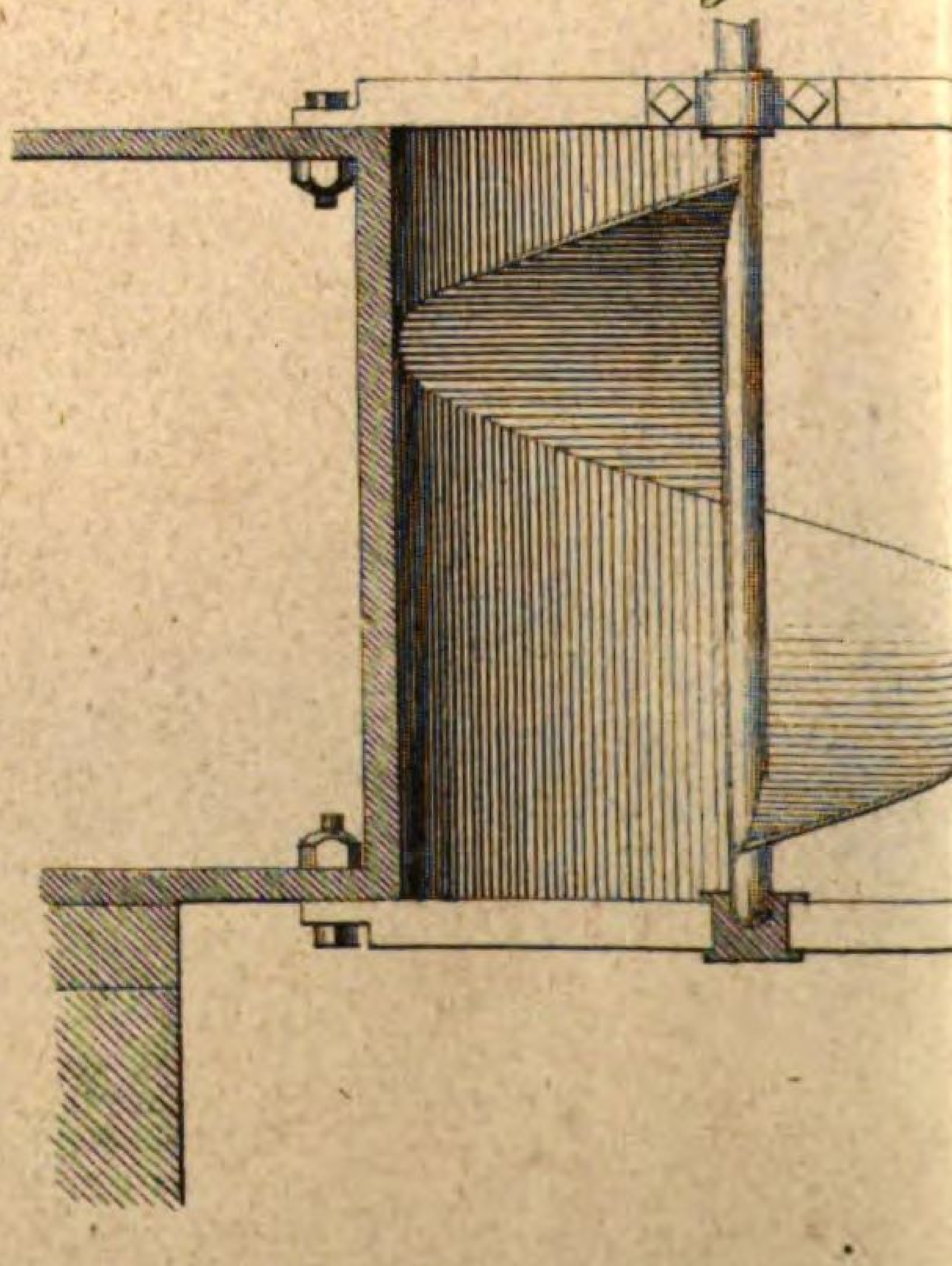
Saugender Ventilator, der sich um

Fig. 3.



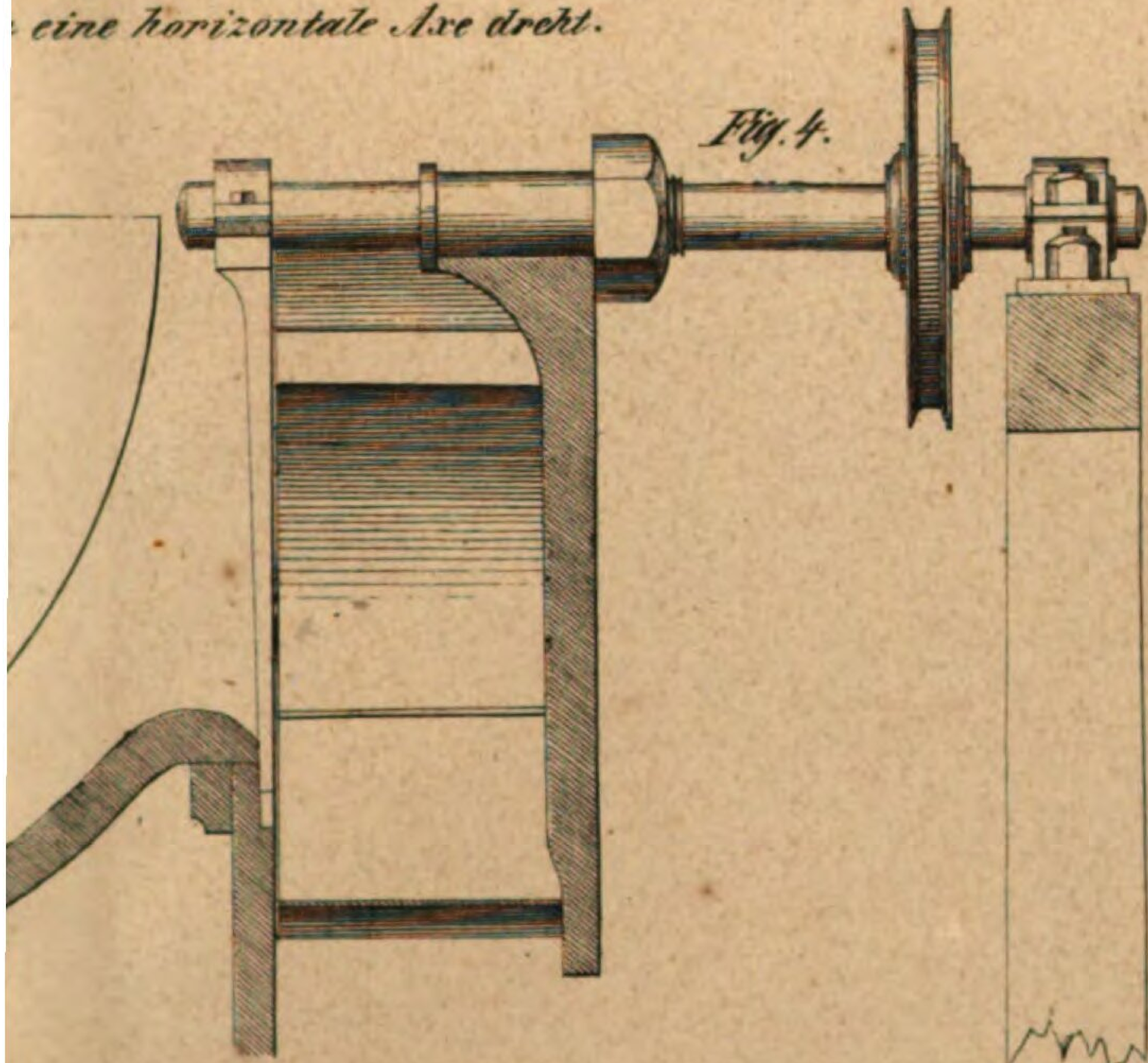
Pneumatische Schrau

Fig. 5.



. eine horizontale Axe dreht.

Fig. 4.



Pneumatische Schraube.

Fig. 6.

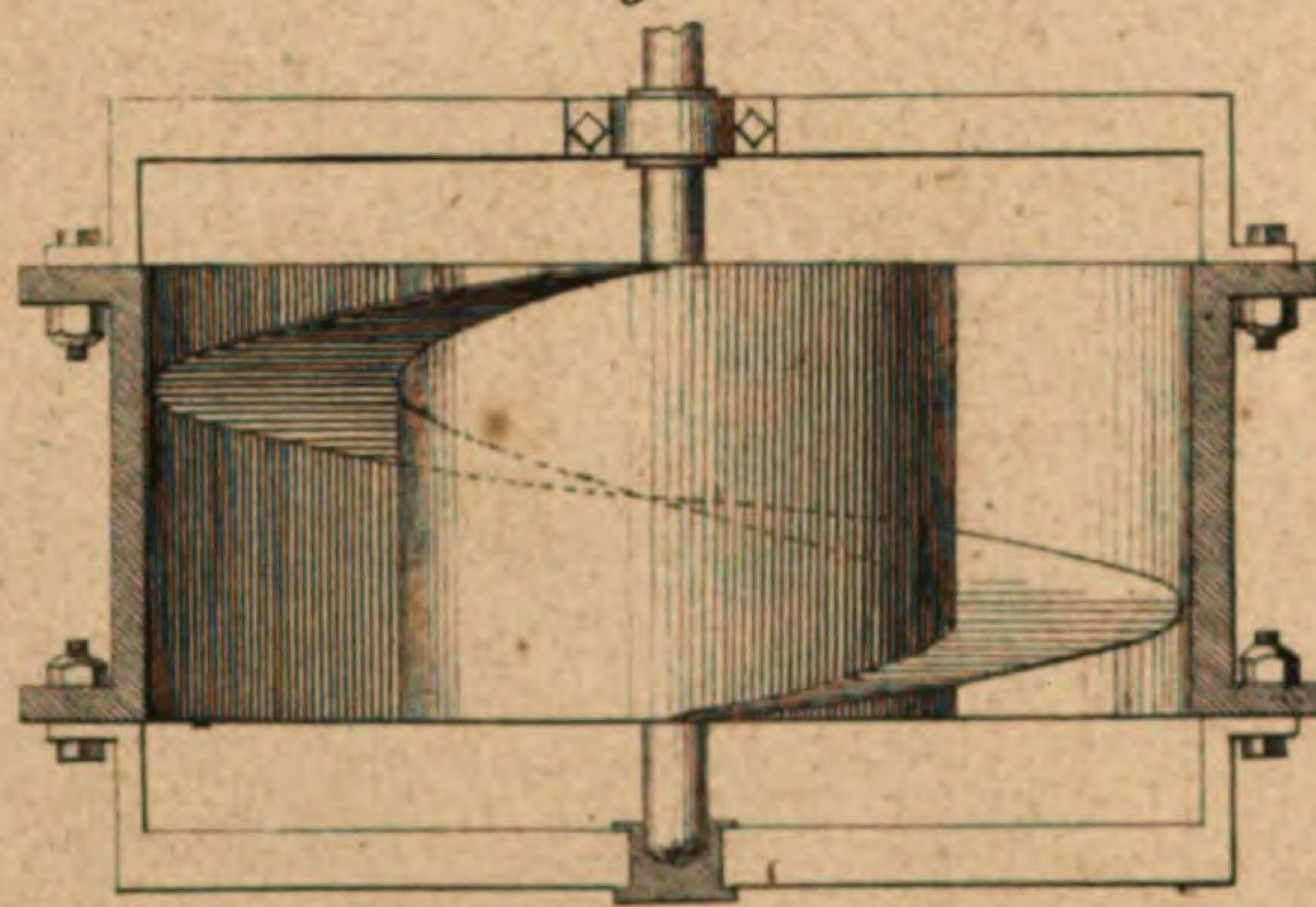
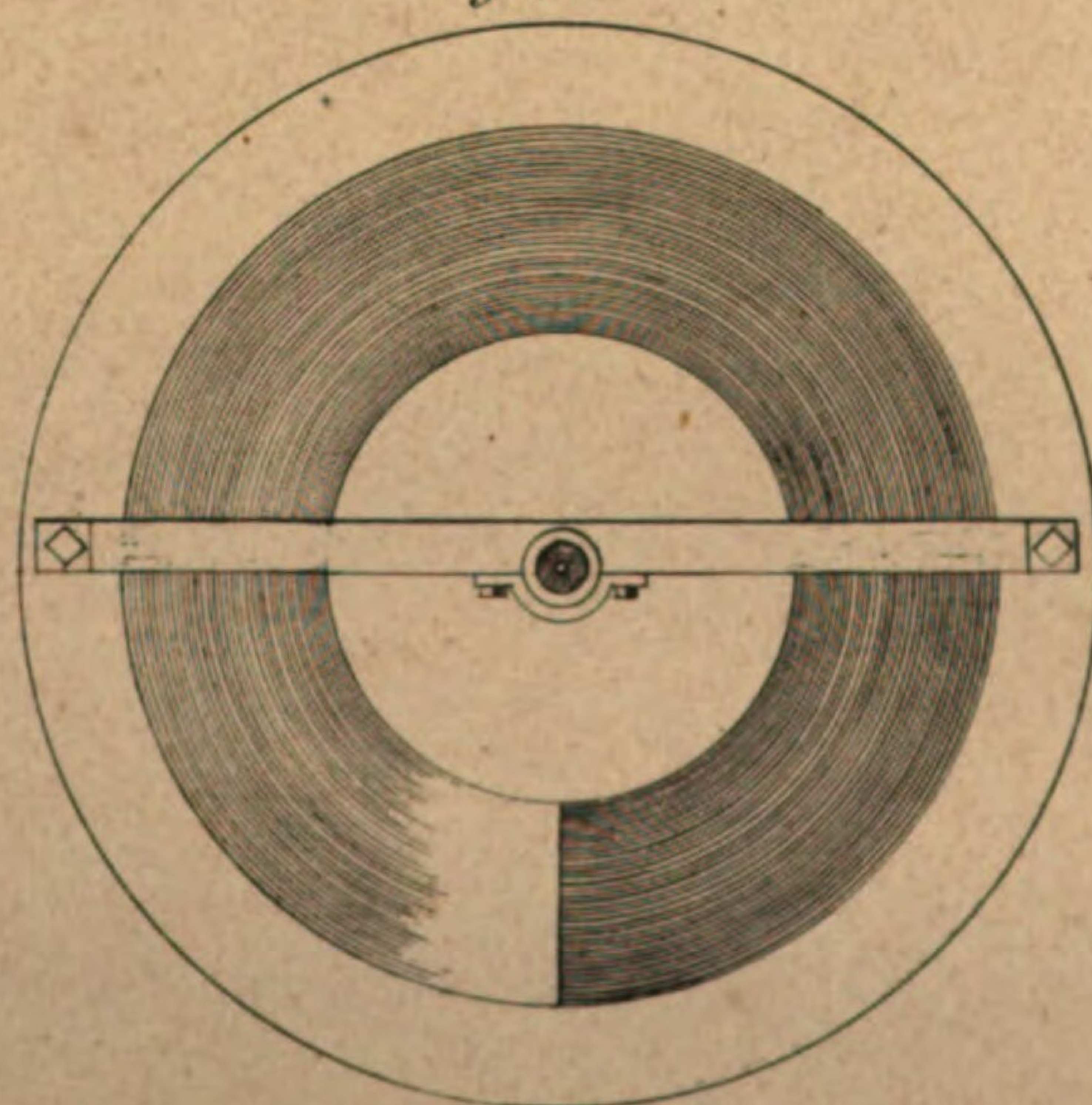
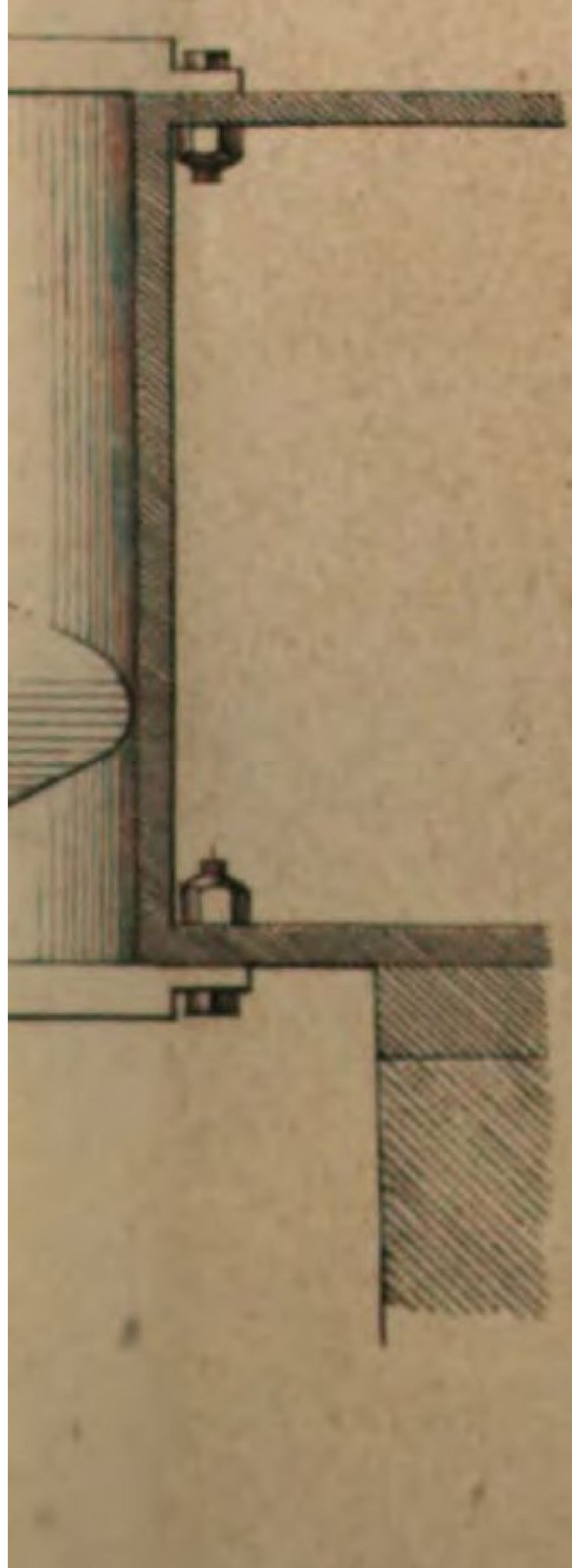


Fig. 7.



be.



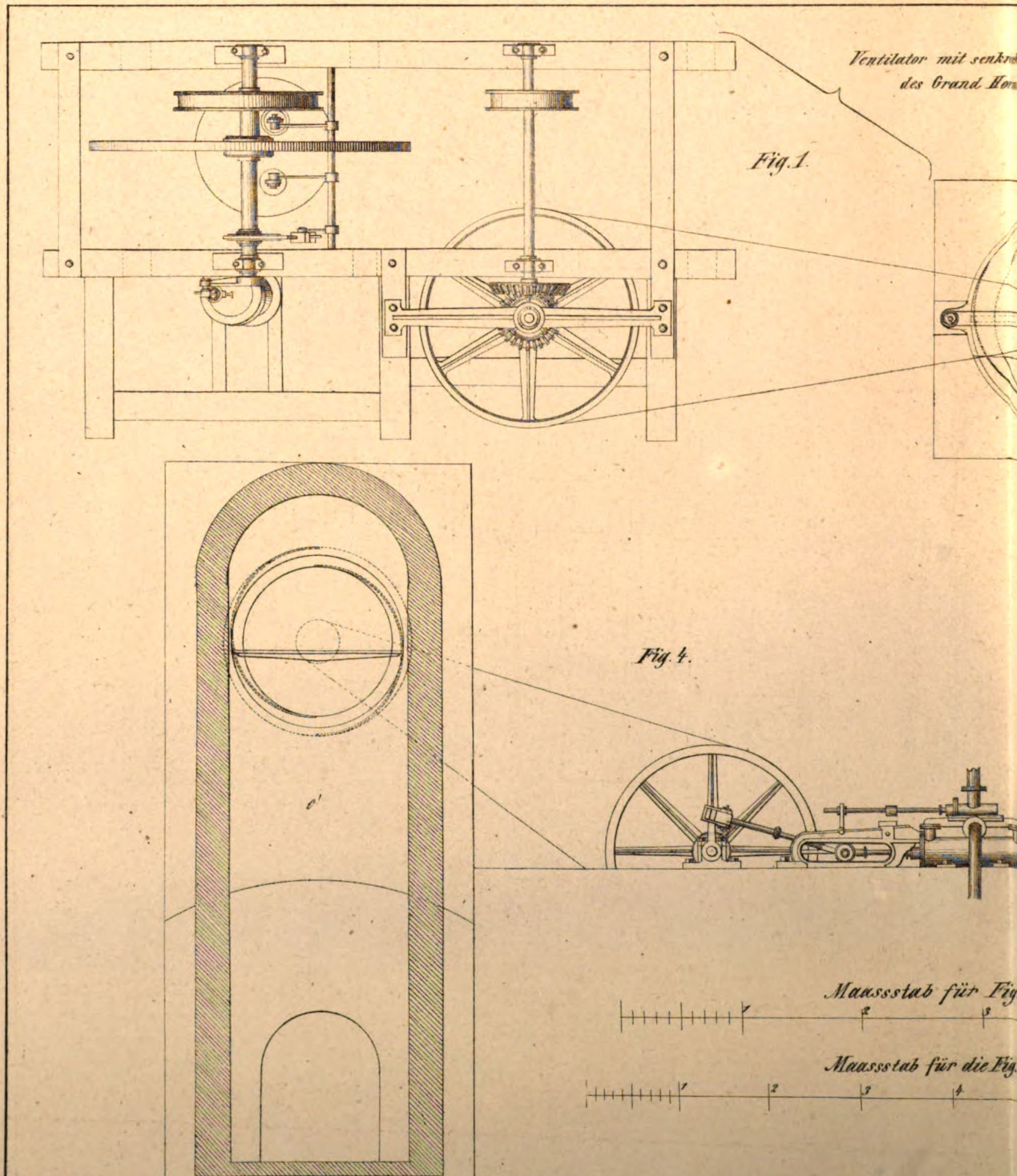
Maassstab der Fig. 5, 6 u. 7.

1 2 3 4 5 6 7 8 9 1 metre.

Maassstab der Fig. 1 bis 4.

1 2 3 4 5 6 7 8 9 1 metre.

Ventilator des Grand Ho



…rechter Welle
…ornu.

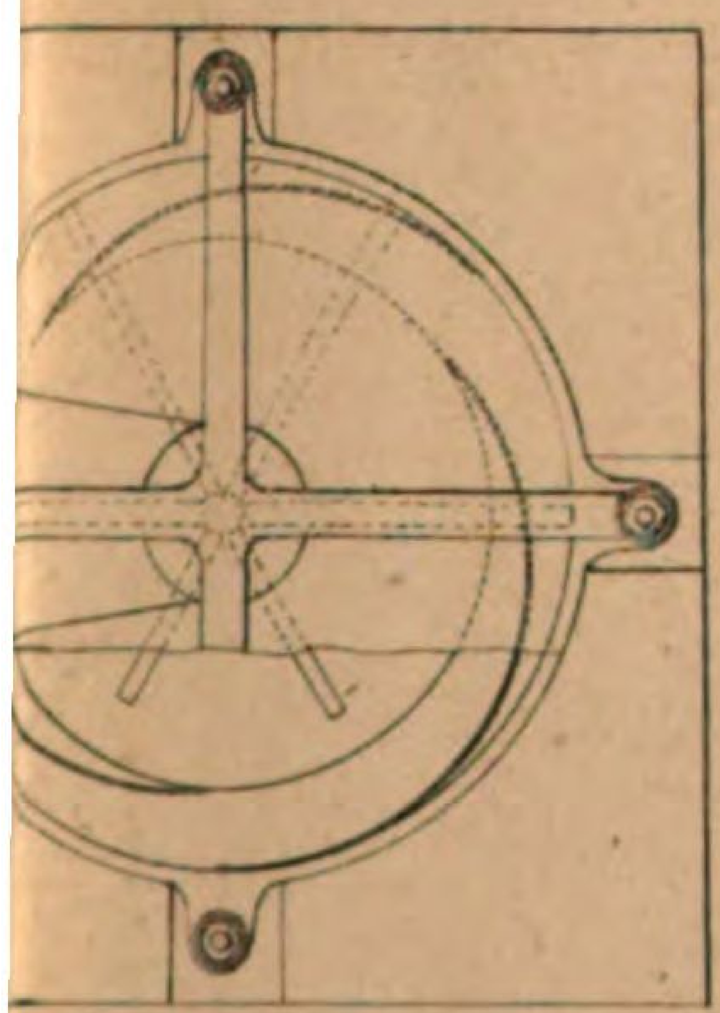




Fig. 2.

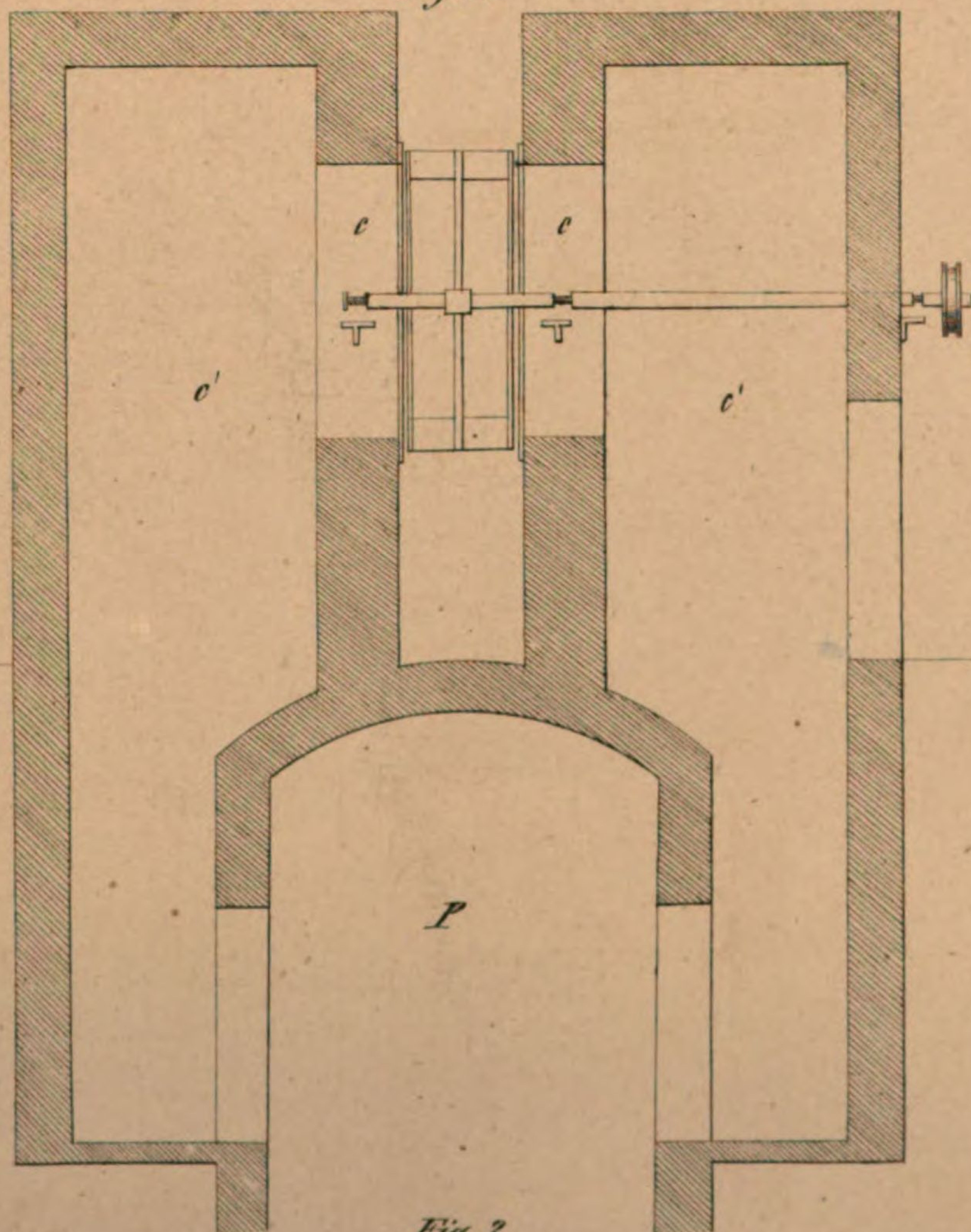
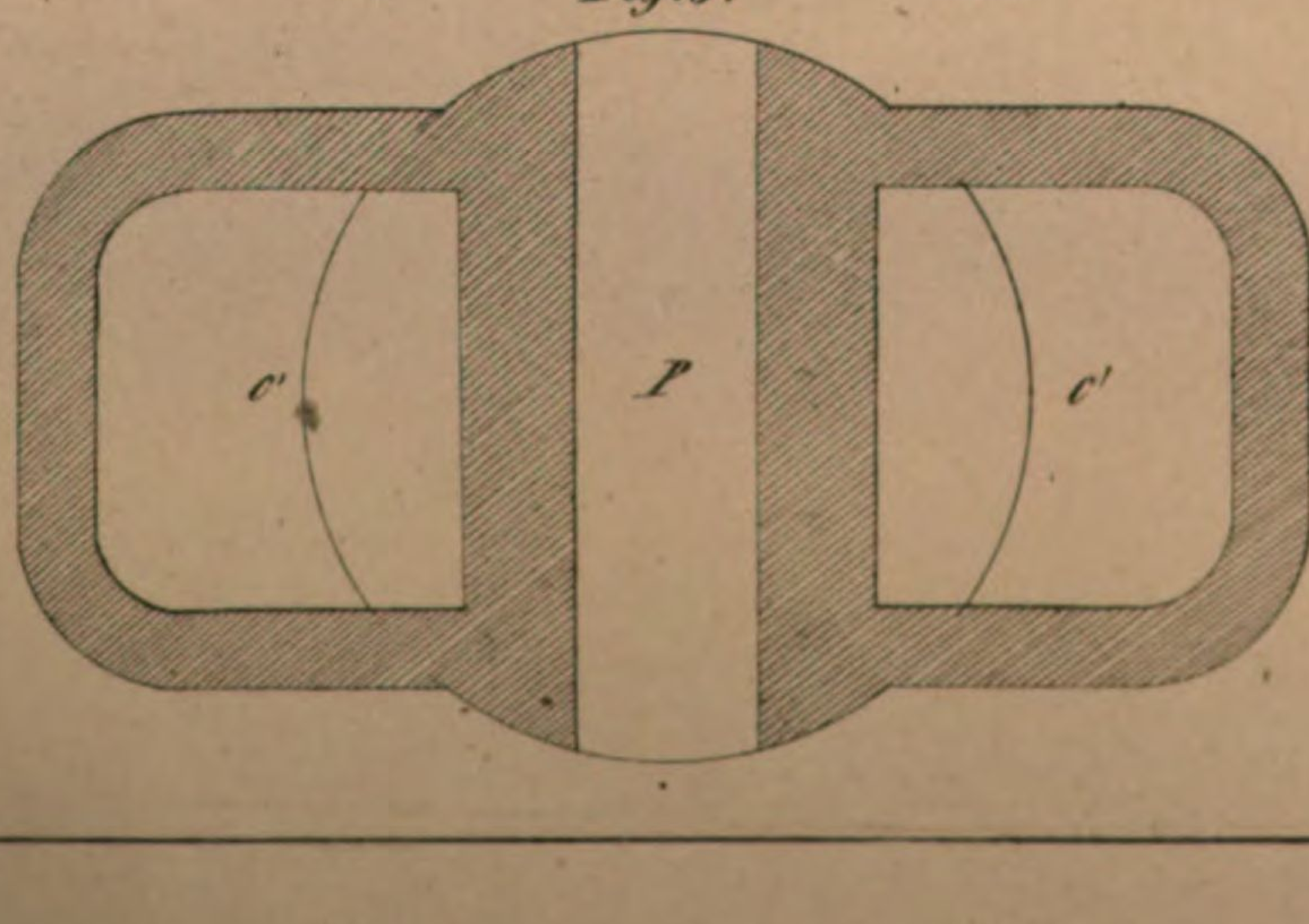


Fig. 3.



…1.
4 5 mètres.

…2,3 u. 4.
5 6 7 mètres.

Wetterführung, Davysche Sic

Fig. 1.

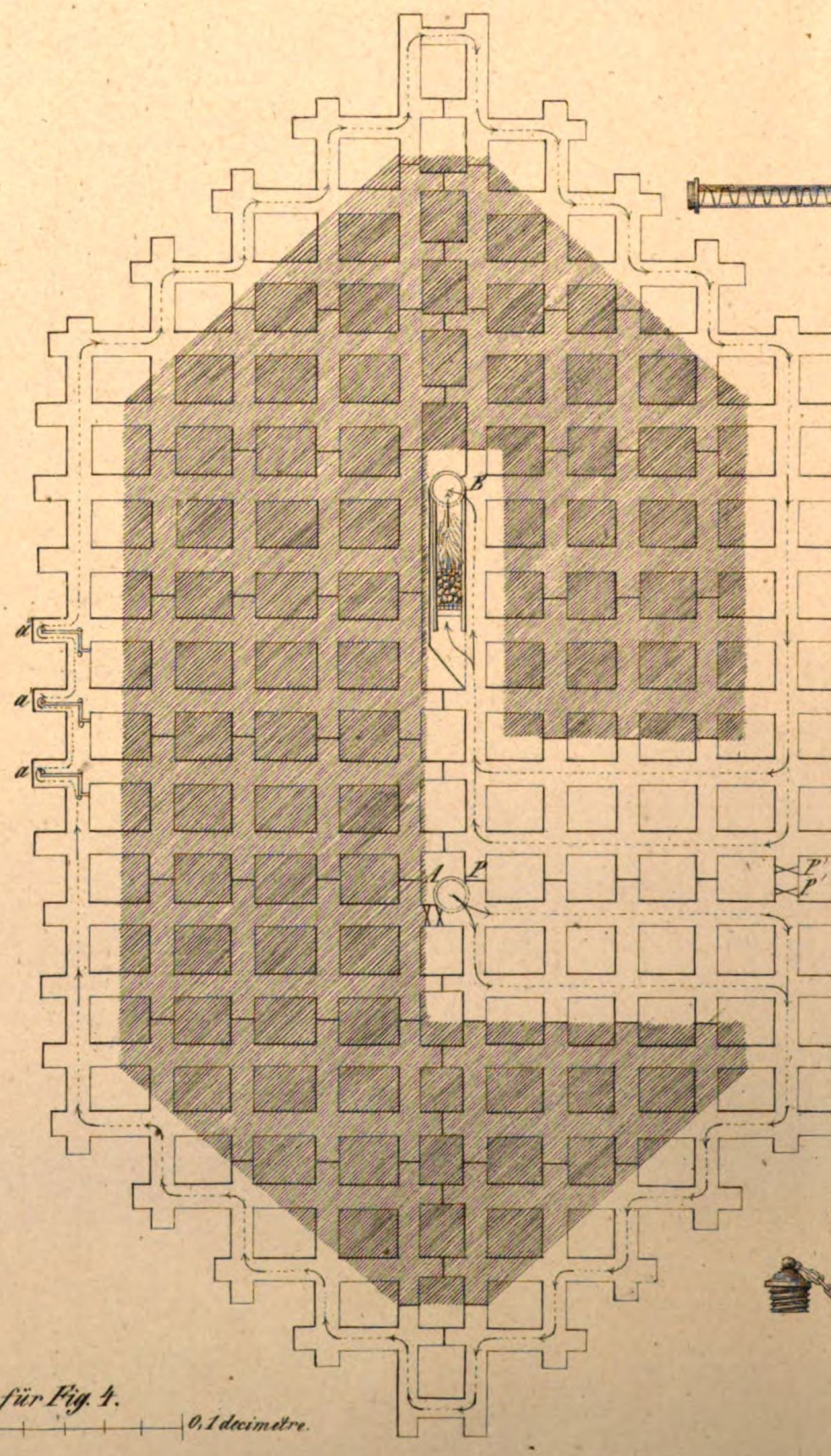


Fig. 3.

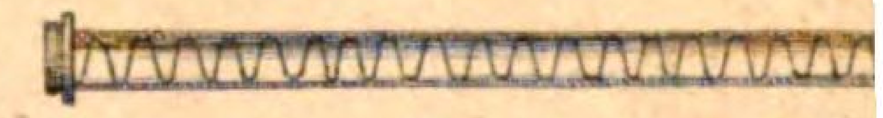
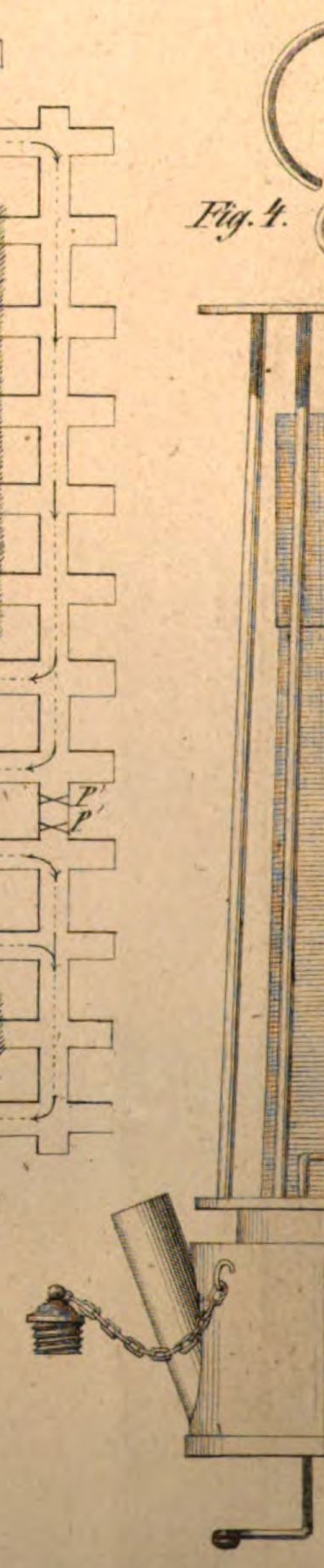
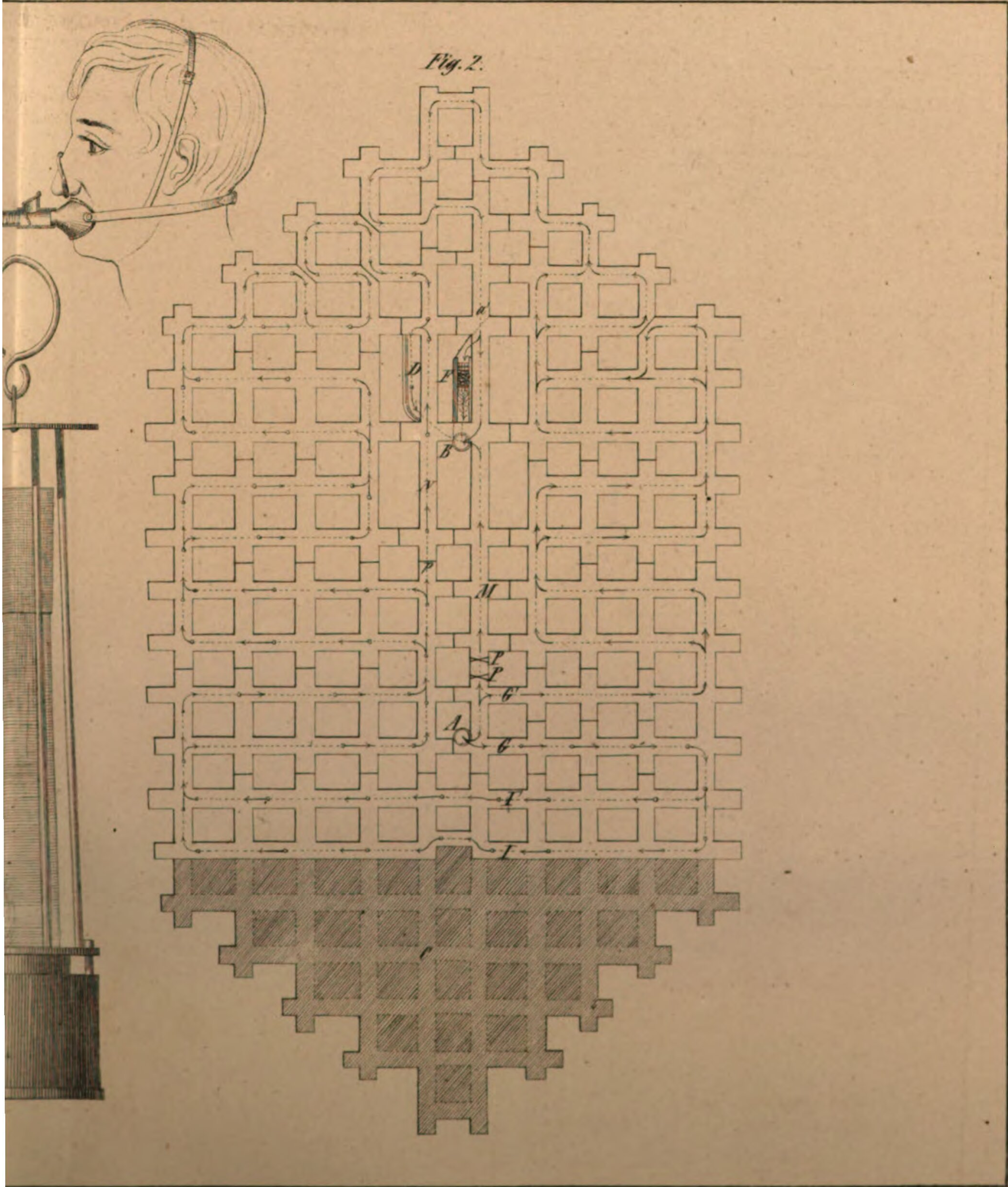


Fig. 4.



Maassstab für Fig. 4.

0,1 decimètre.


Fig. 2.

Wetterführung und Erl

Fig. 1.

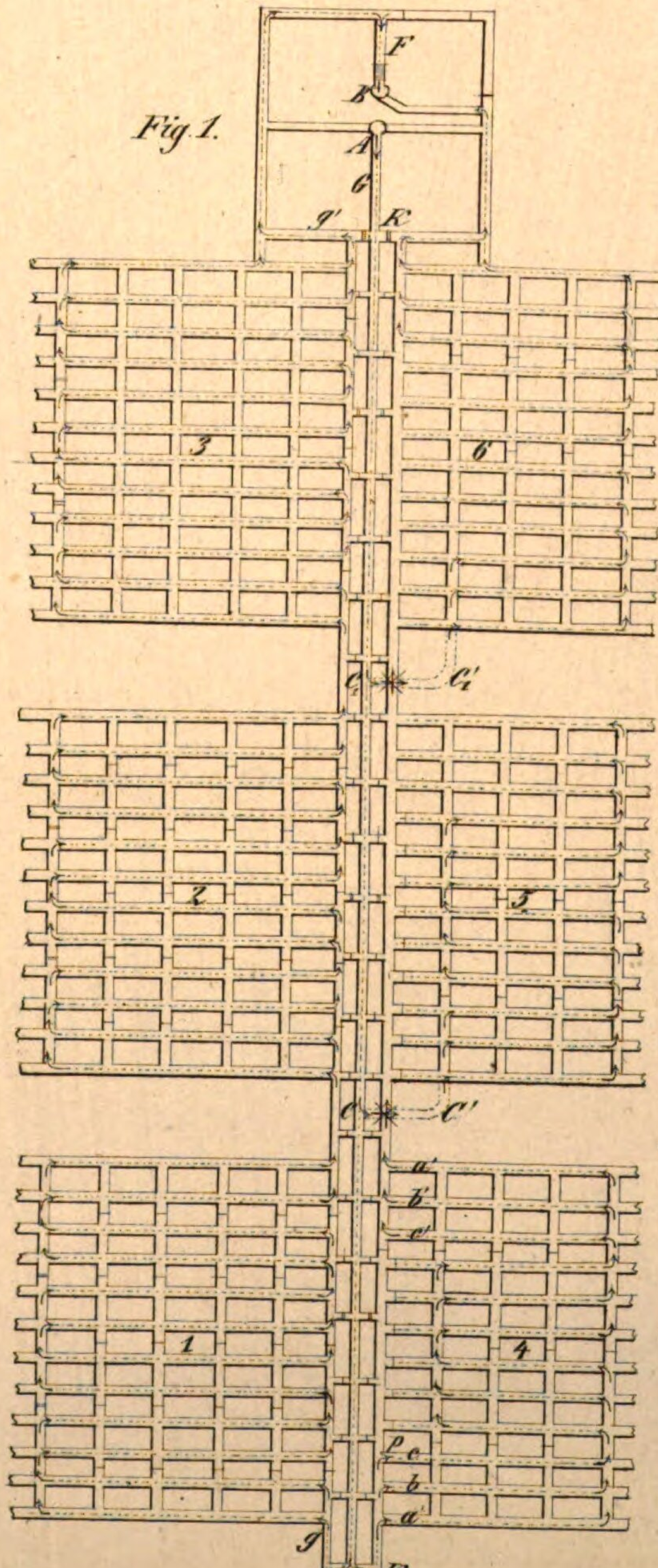


Fig. 2.

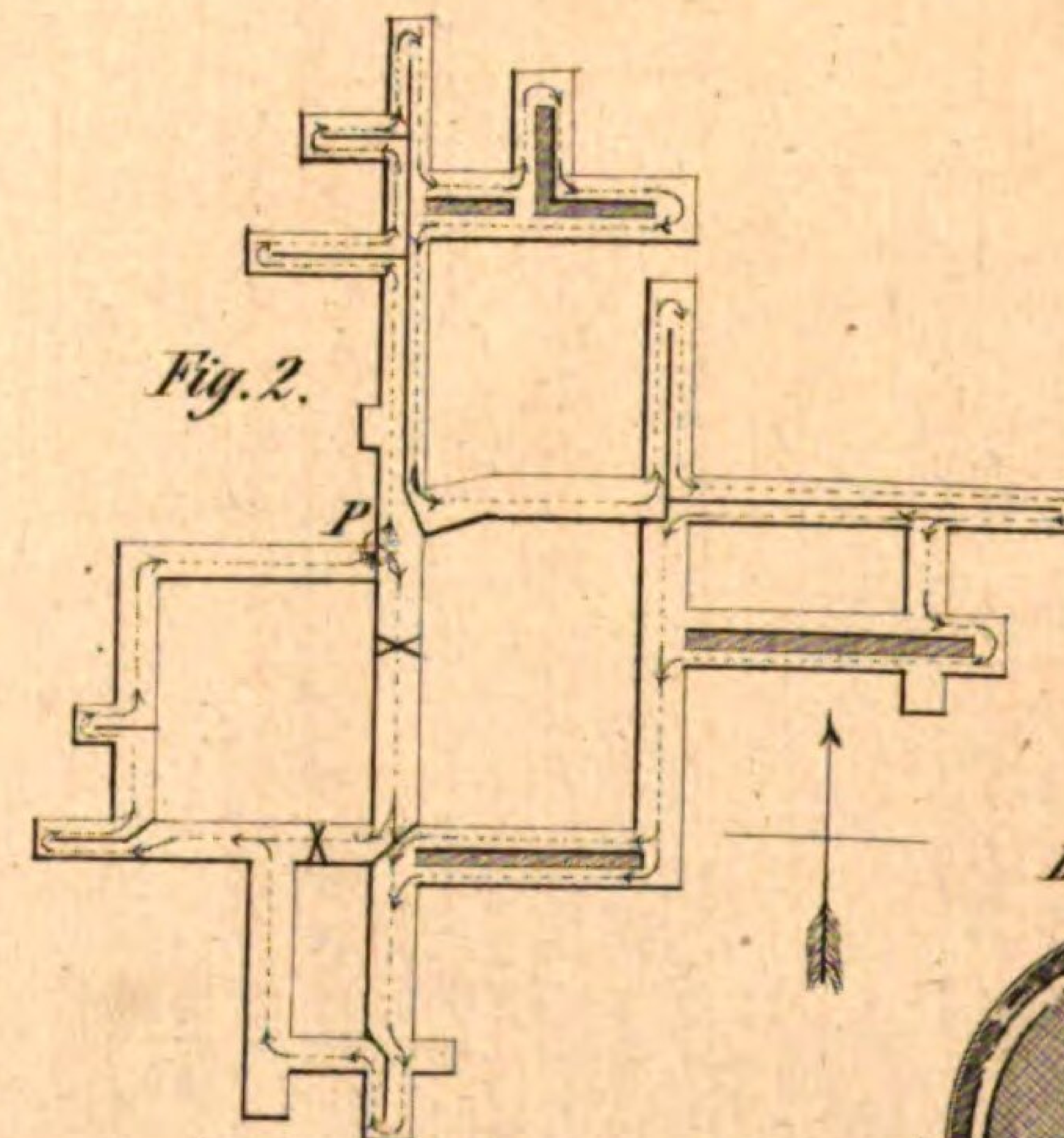


Fig. 4 (A)
Durchschnitt n

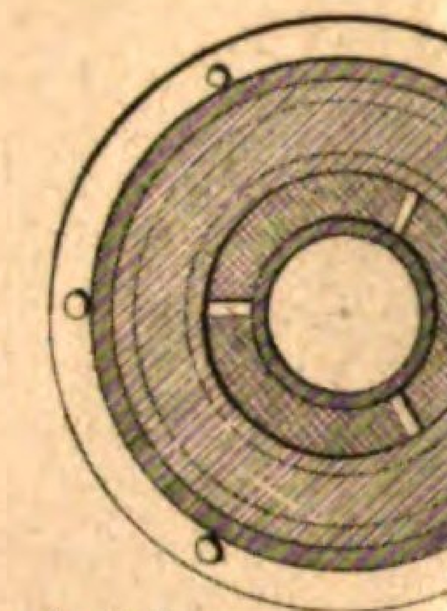


Fig. 4 (B).
Durchschnitt nach c d.

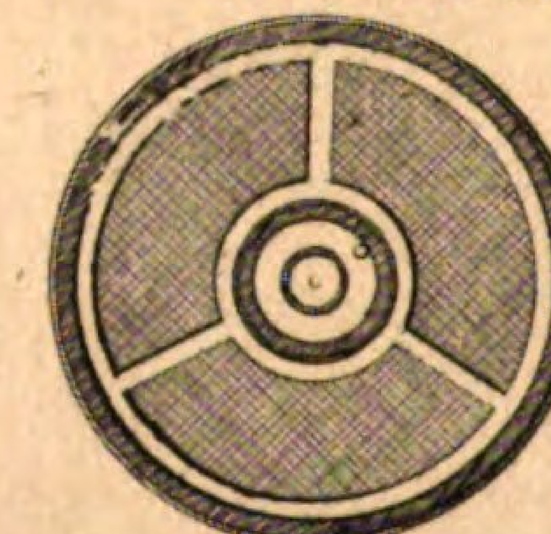
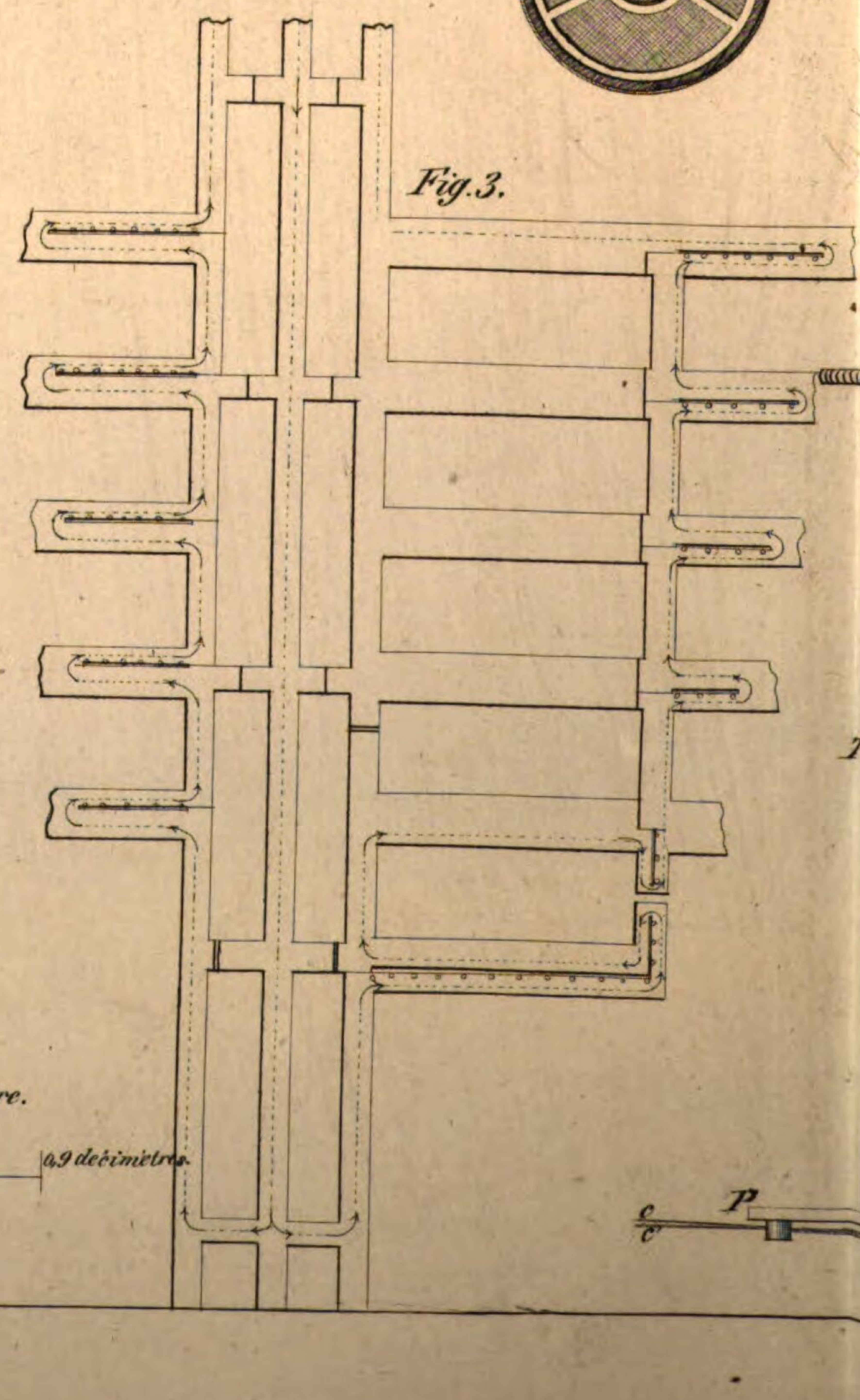


Fig. 3.

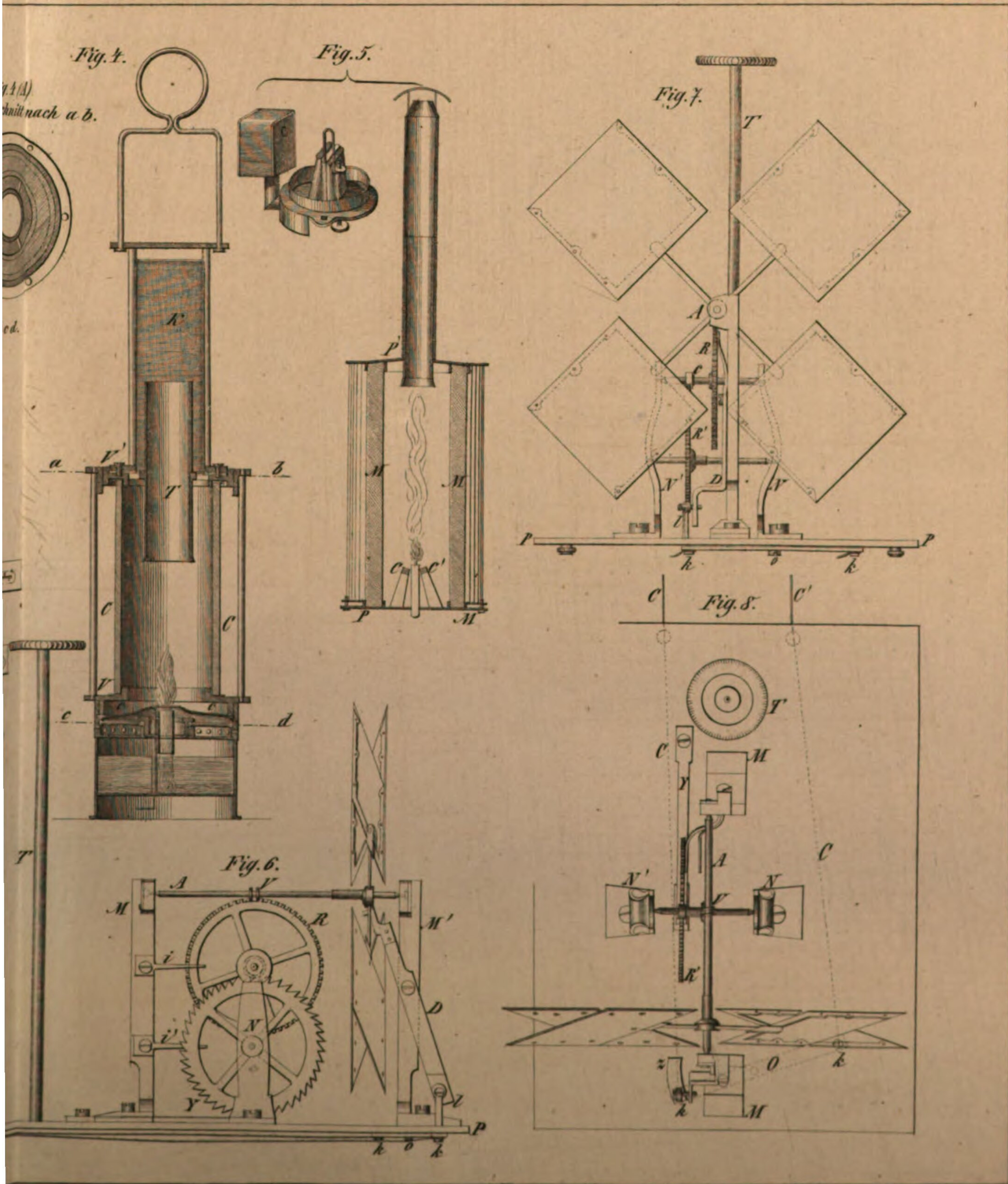


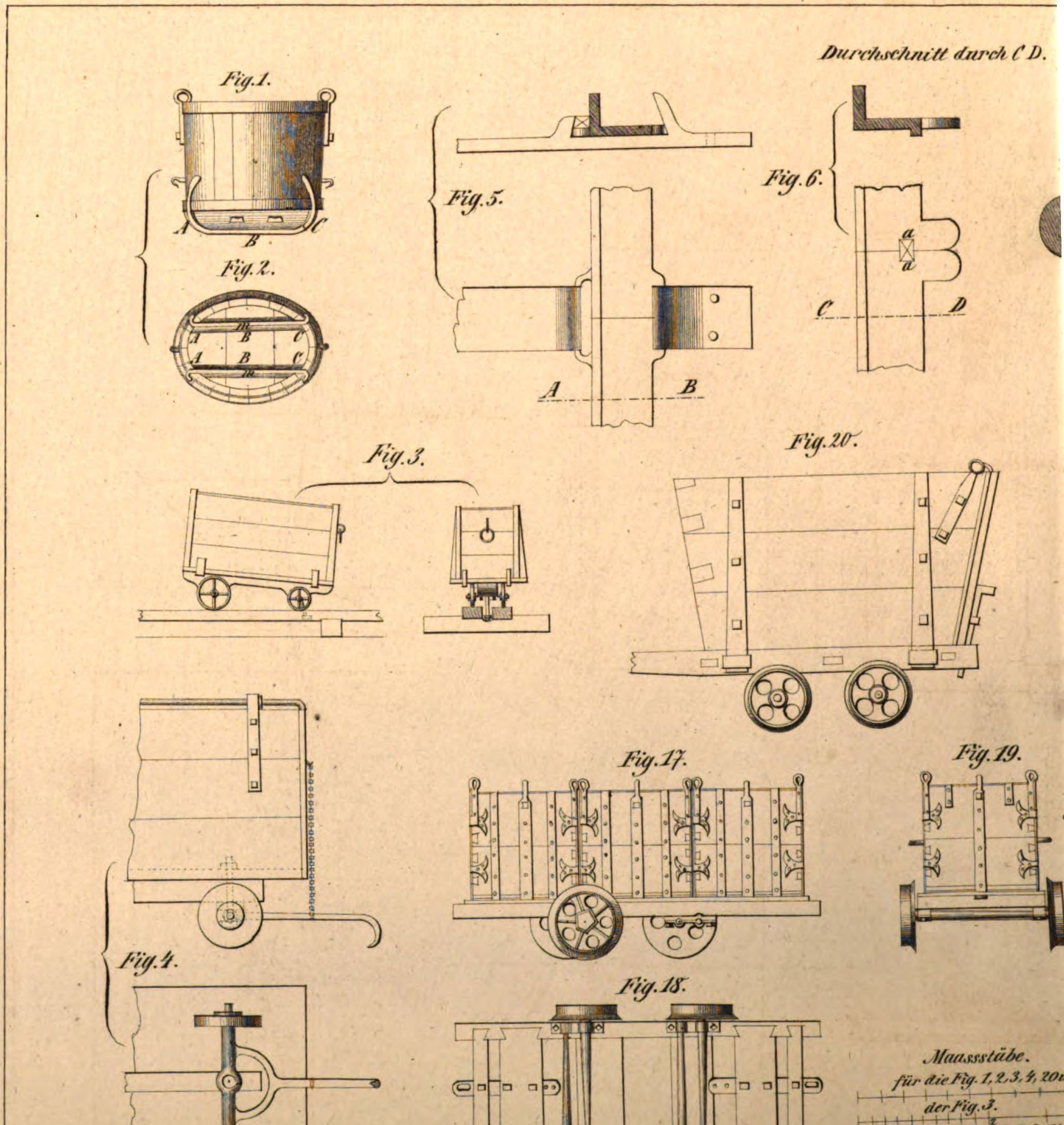
Maassstab für die Fig. 4, 4. (A) u. 4 (B).

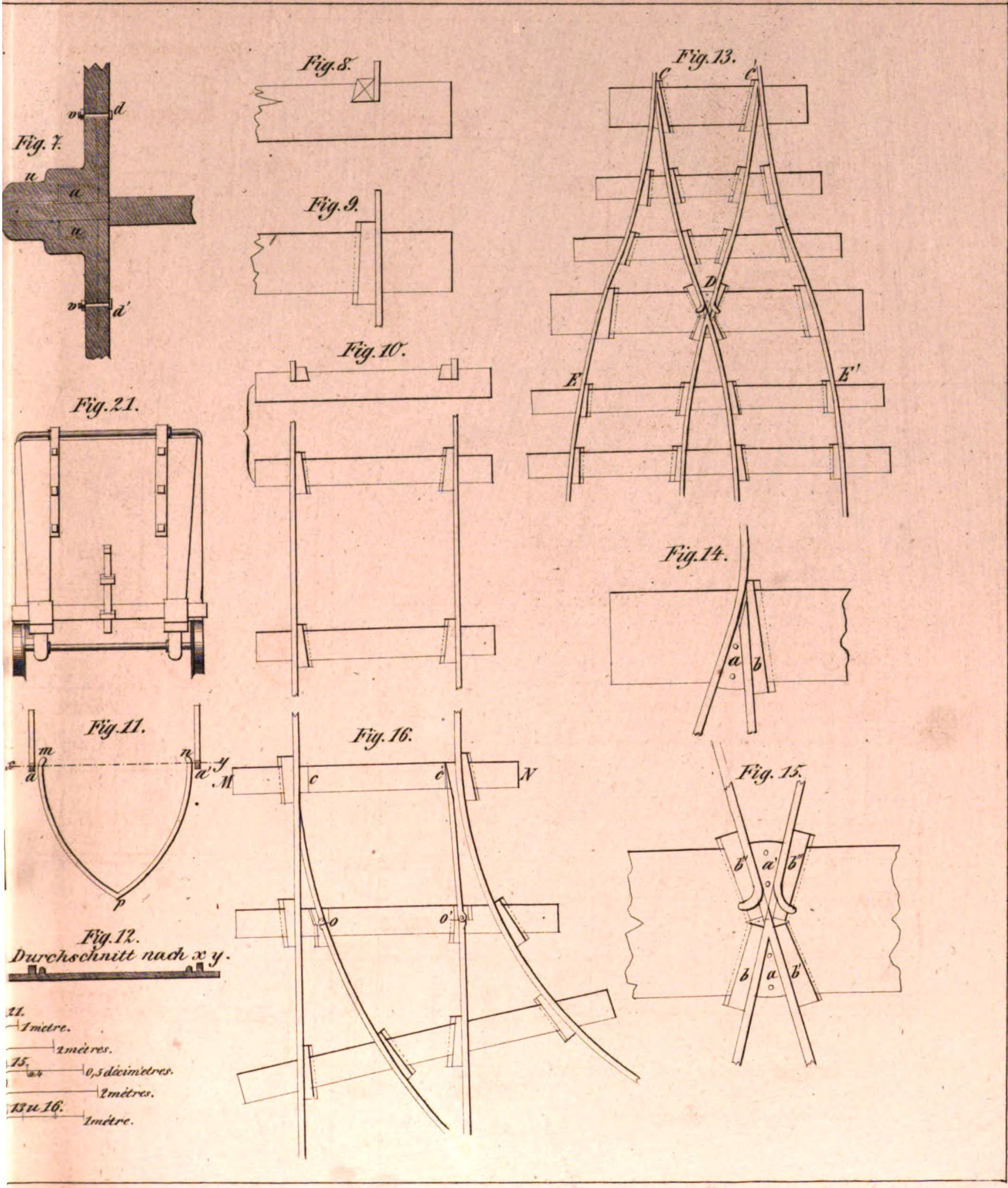
0,1 — 0,2 decimetre.

Maassstab für die Fig. 6, 7 u. 8.

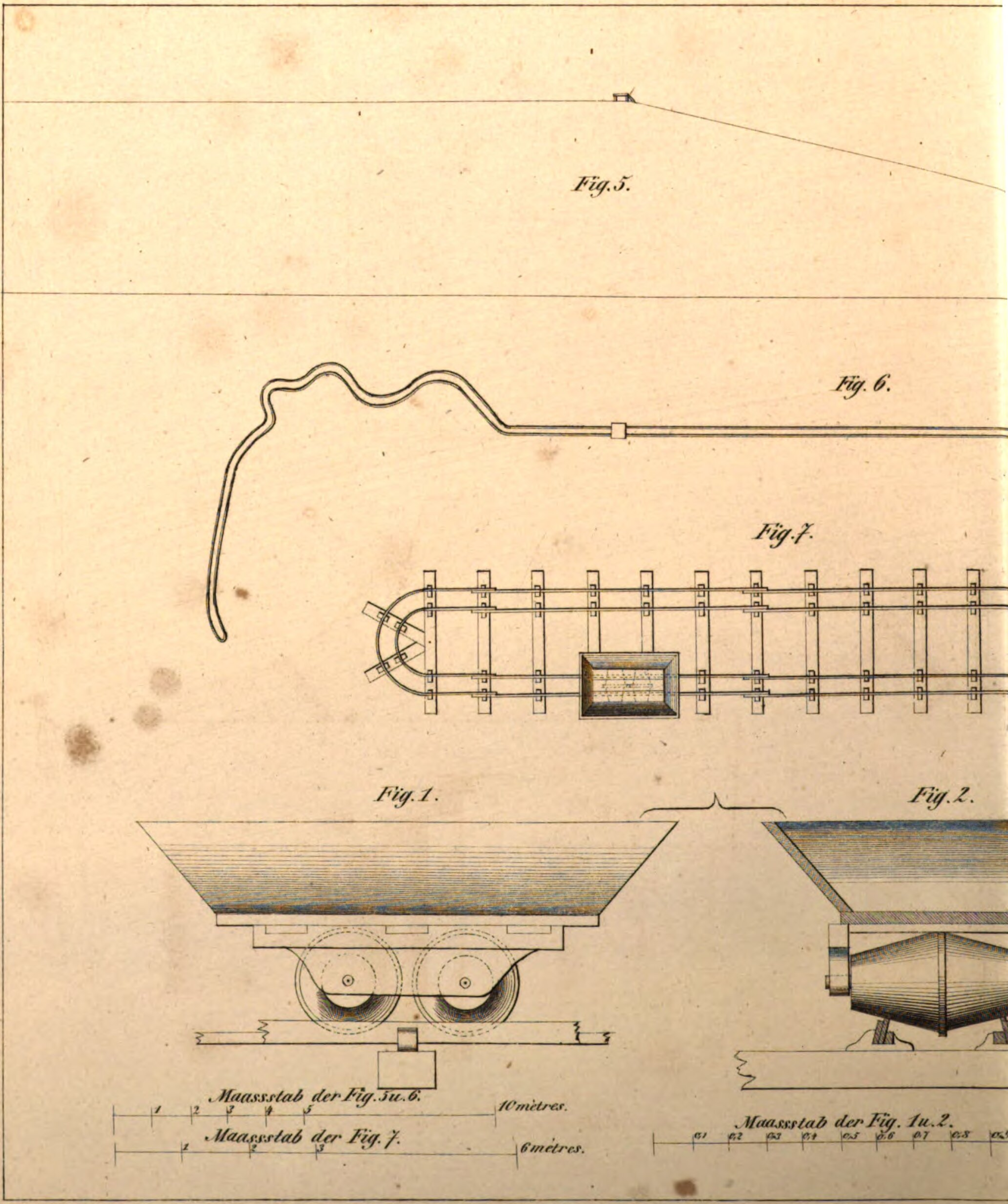
0,1 — 0,2 — 0,3 — 0,4 — 0,5 — 0,6 — 0,7 — 0,8 — 0,9 decimetres.


Fig. 4.
Fig. 5.
Fig. 6.
Fig. 7.
Fig. 8.


Durchschnitt durch C D.
Fig.1.
A
B
C
Fig.2.
m
A
B
C
Fig.5.
A
B
Fig.6.
a
C
D
Fig.3.
Fig.20.
Fig.4.
Fig.17.
Fig.19.
Fig.18.
Maassstäbe.
der Fig.3.


Fig. 7.
Fig. 8.
Fig. 9.
Fig. 10.
Fig. 11.
Fig. 12.
Durchschnitt nach x y.
Fig. 13.
Fig. 14.
Fig. 15.
Fig. 16.
Fig. 21.
11.
1 mètre.
2 mètres.
15.
0,5 décimètres.
2 mètres.
13 u 16.
1 mètre.

Schienen und Wagen mit konisc



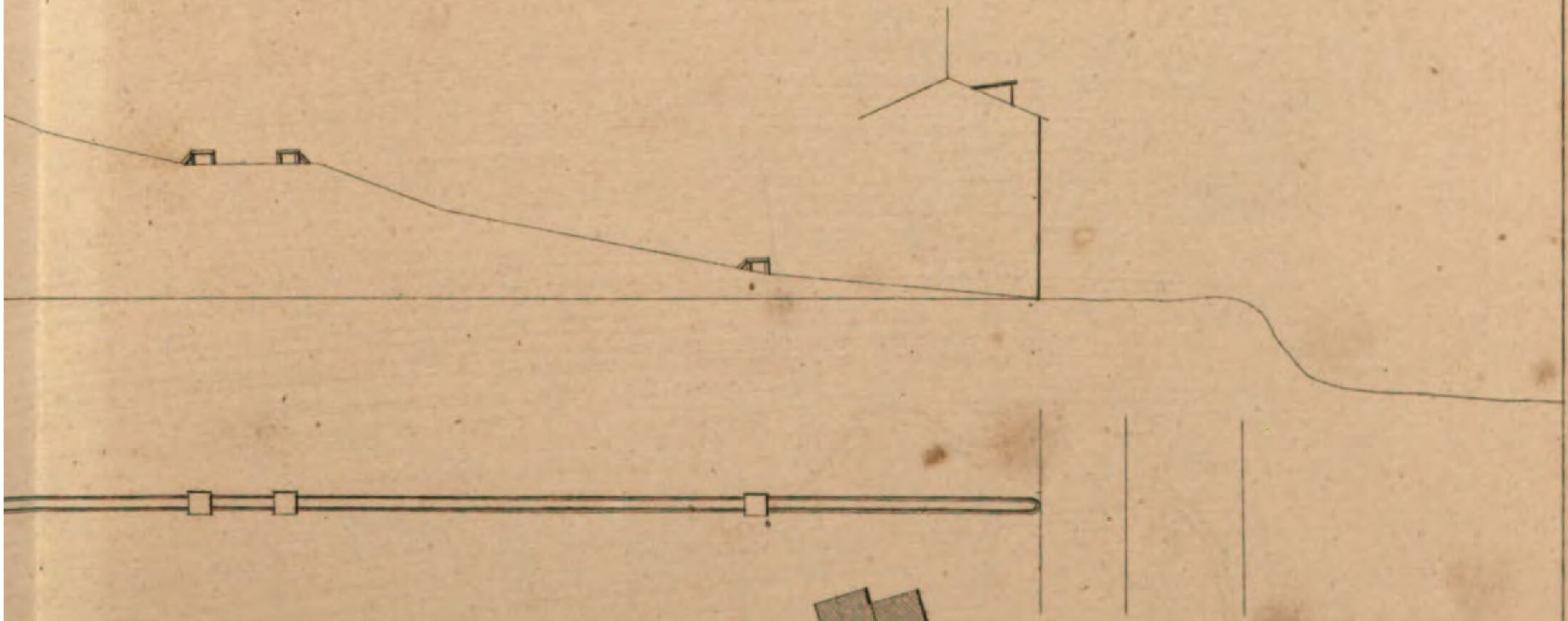




Fig. 3.

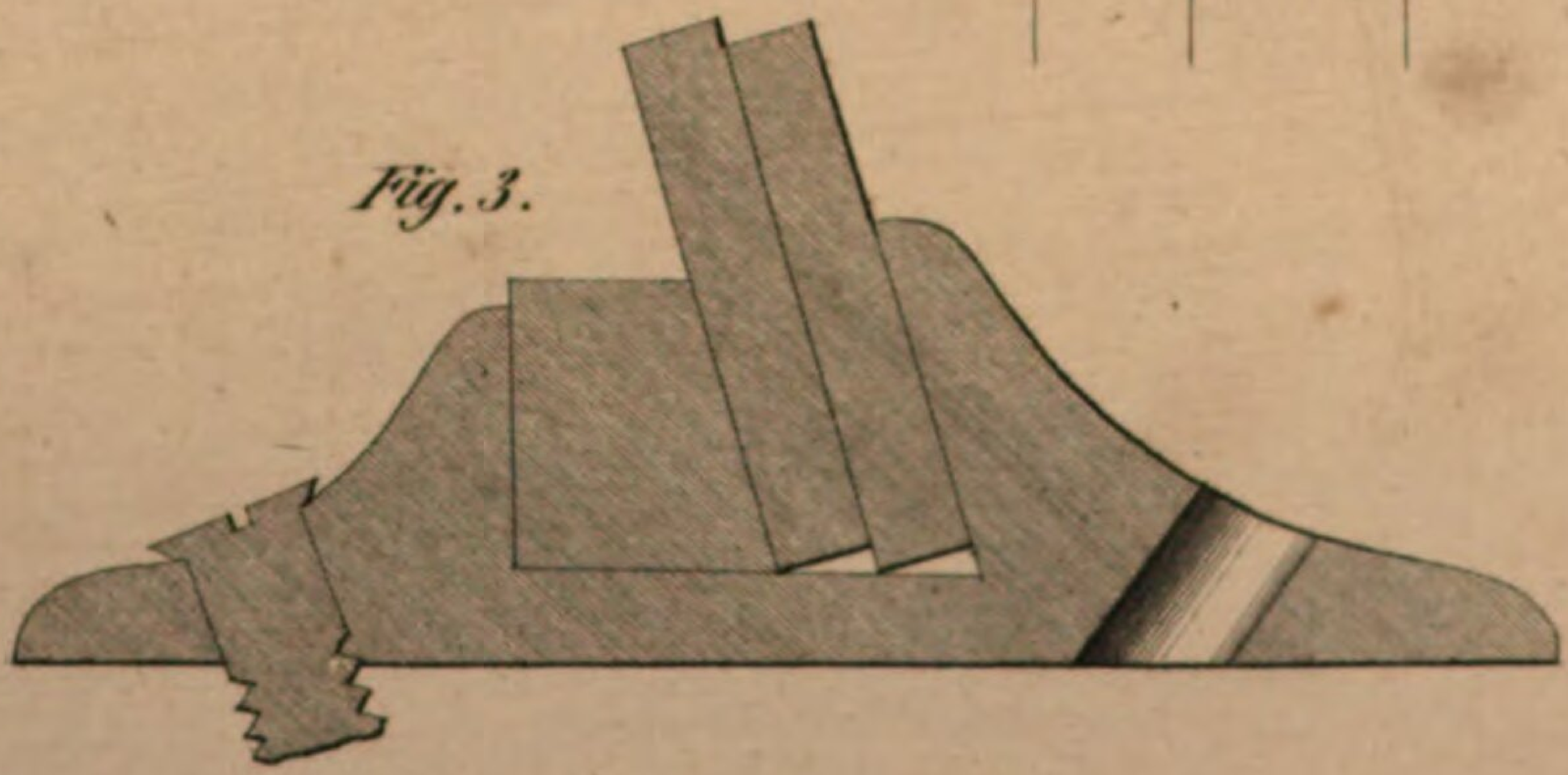
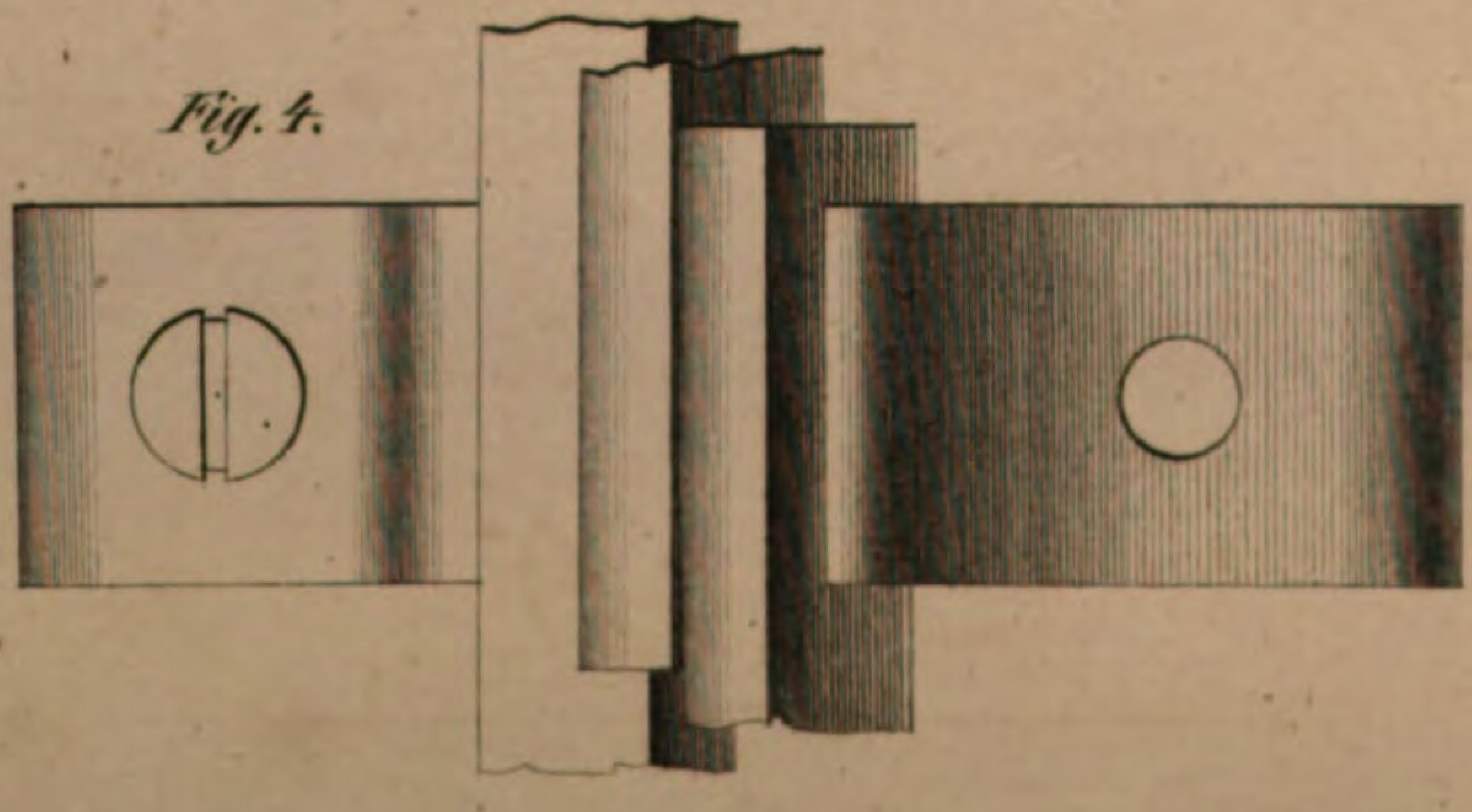


Fig. 4.



1 mètre.

Maassstab der Fig. 5 u. 6.

0,1

0,2 décimètres.

Bremsberge

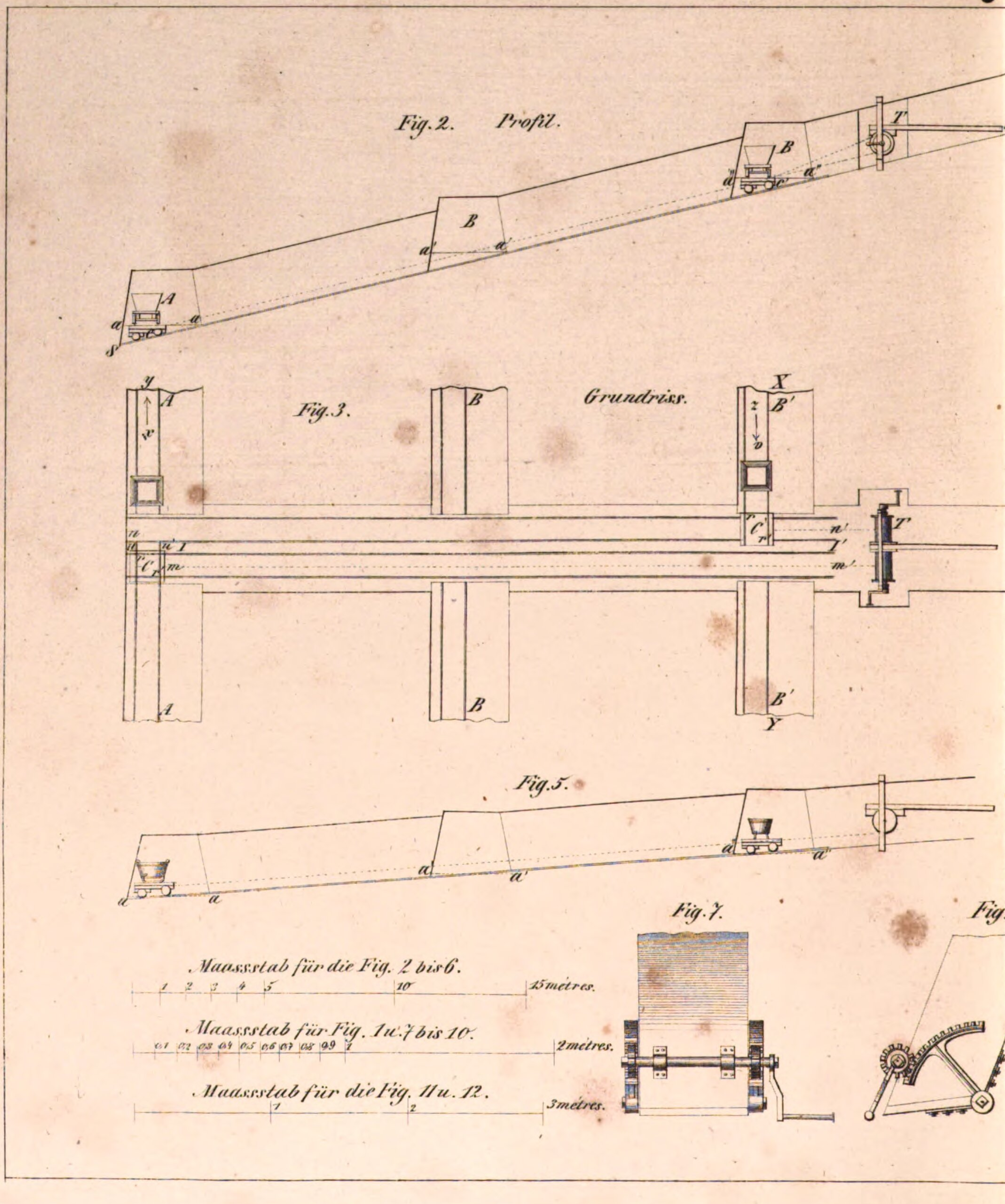

Fig. 2. Profil.
Fig. 3.
Grundriss.
Fig. 5.
Fig. 7.
Maassstab für die Fig. 2 bis 6.
1 2 3 4 5 10 15 mètres.
Maassstab für Fig. 1 u. 7 bis 10.
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1 2 mètres.
Maassstab für die Fig. 11 u. 12.
1 2 3 mètres.

Fig. 1.

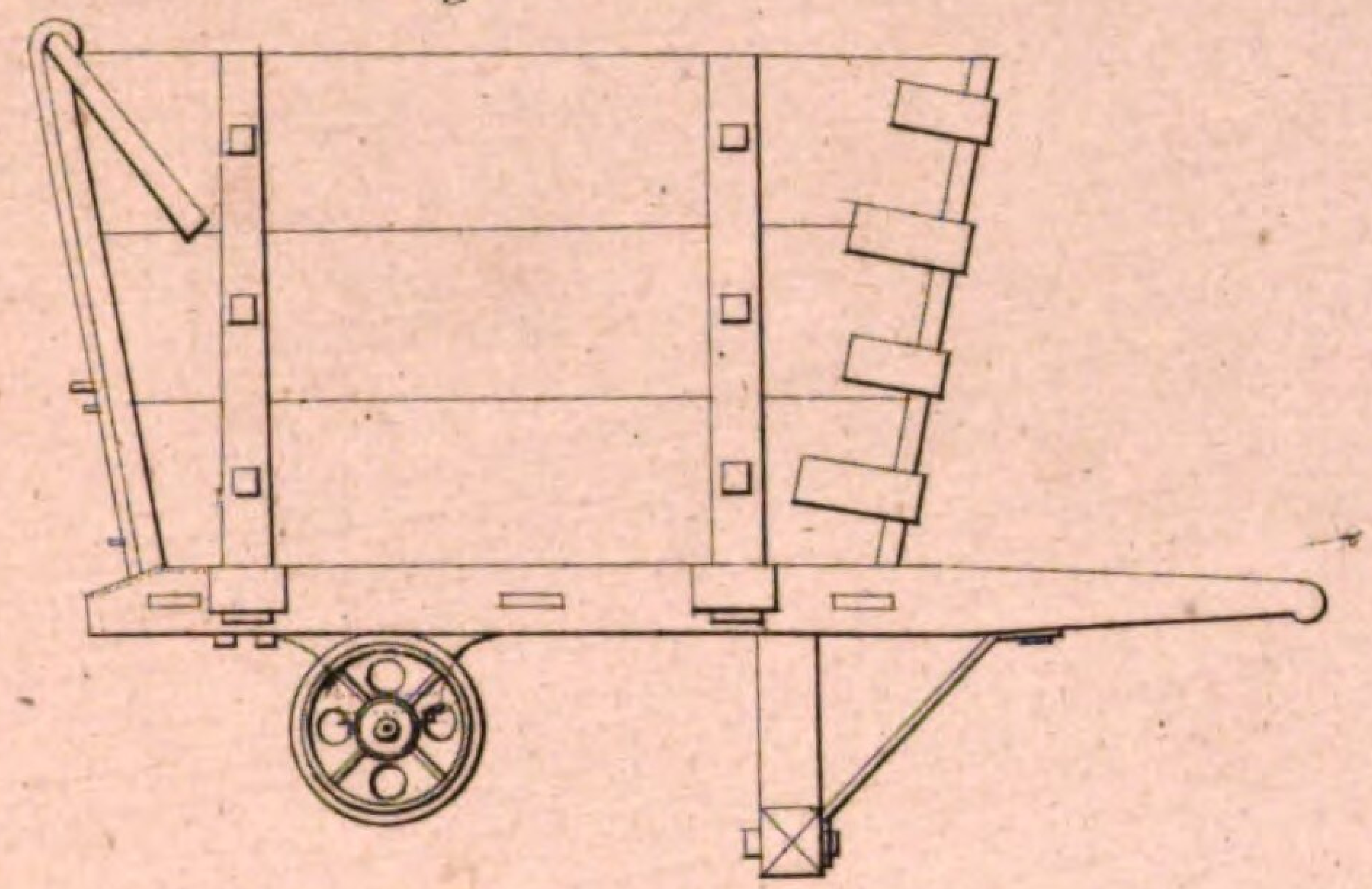


Fig. 9.

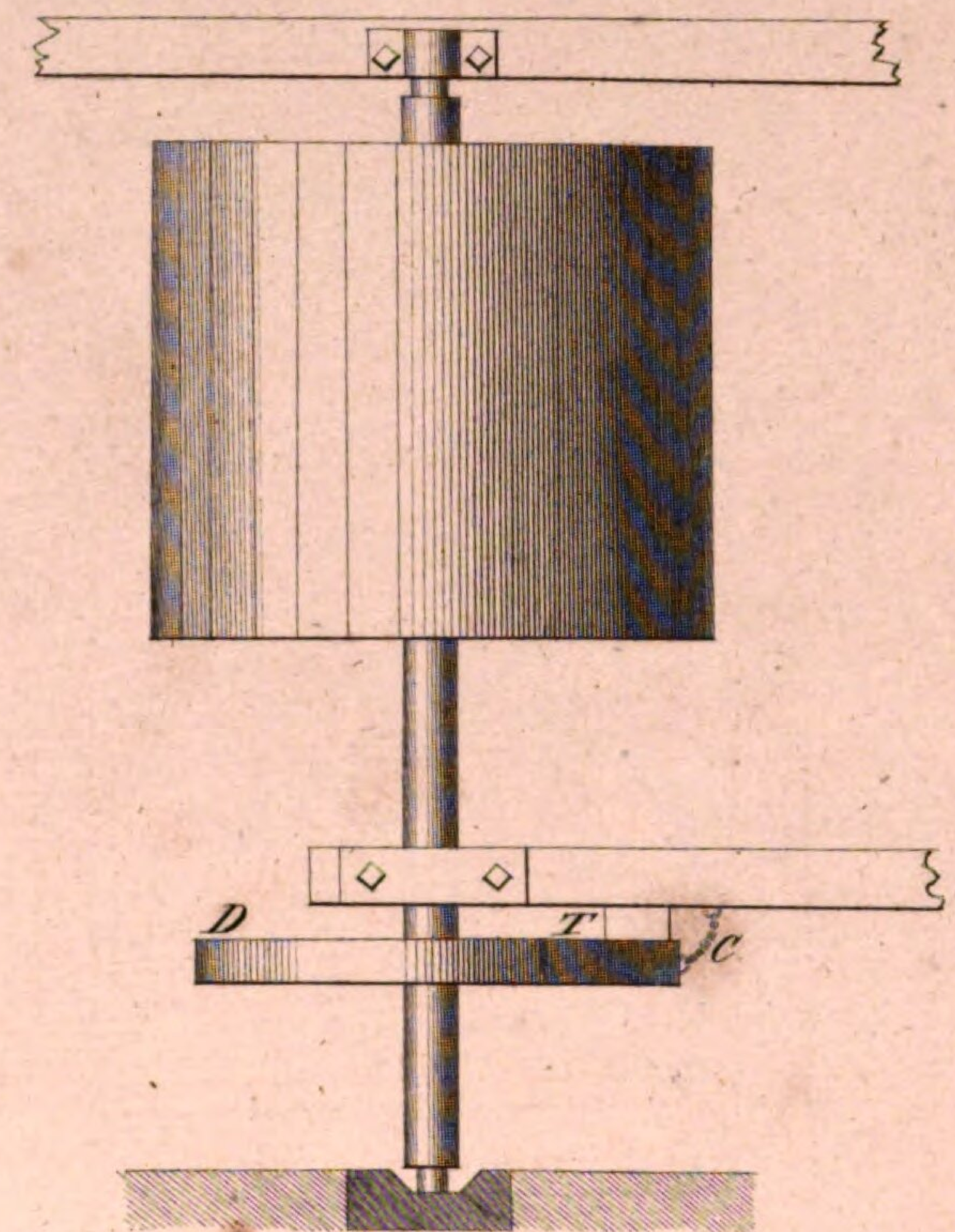


Fig. 4.
Durschschnitt nach XY.

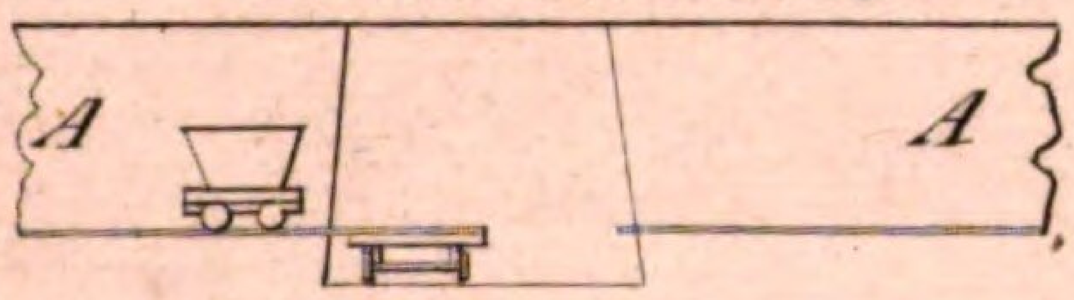


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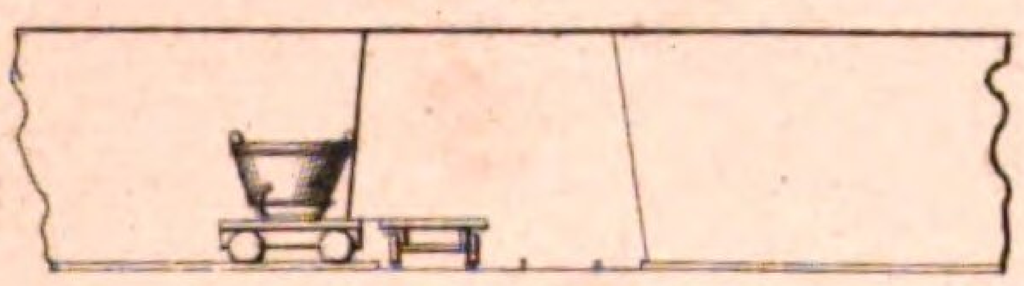


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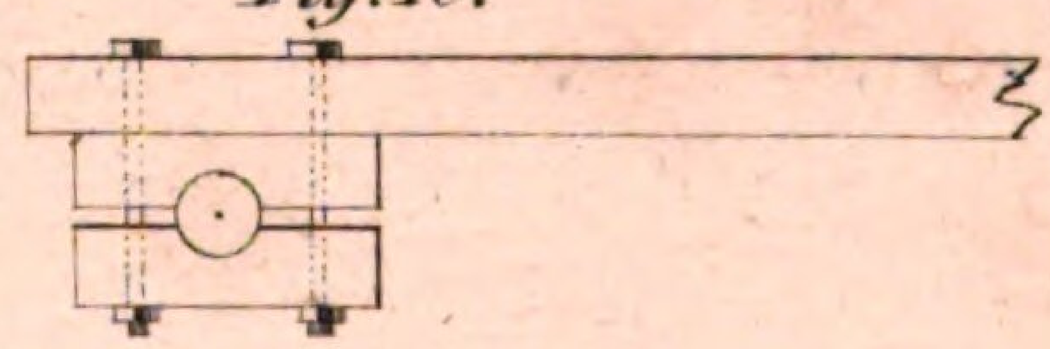


Fig. 11.

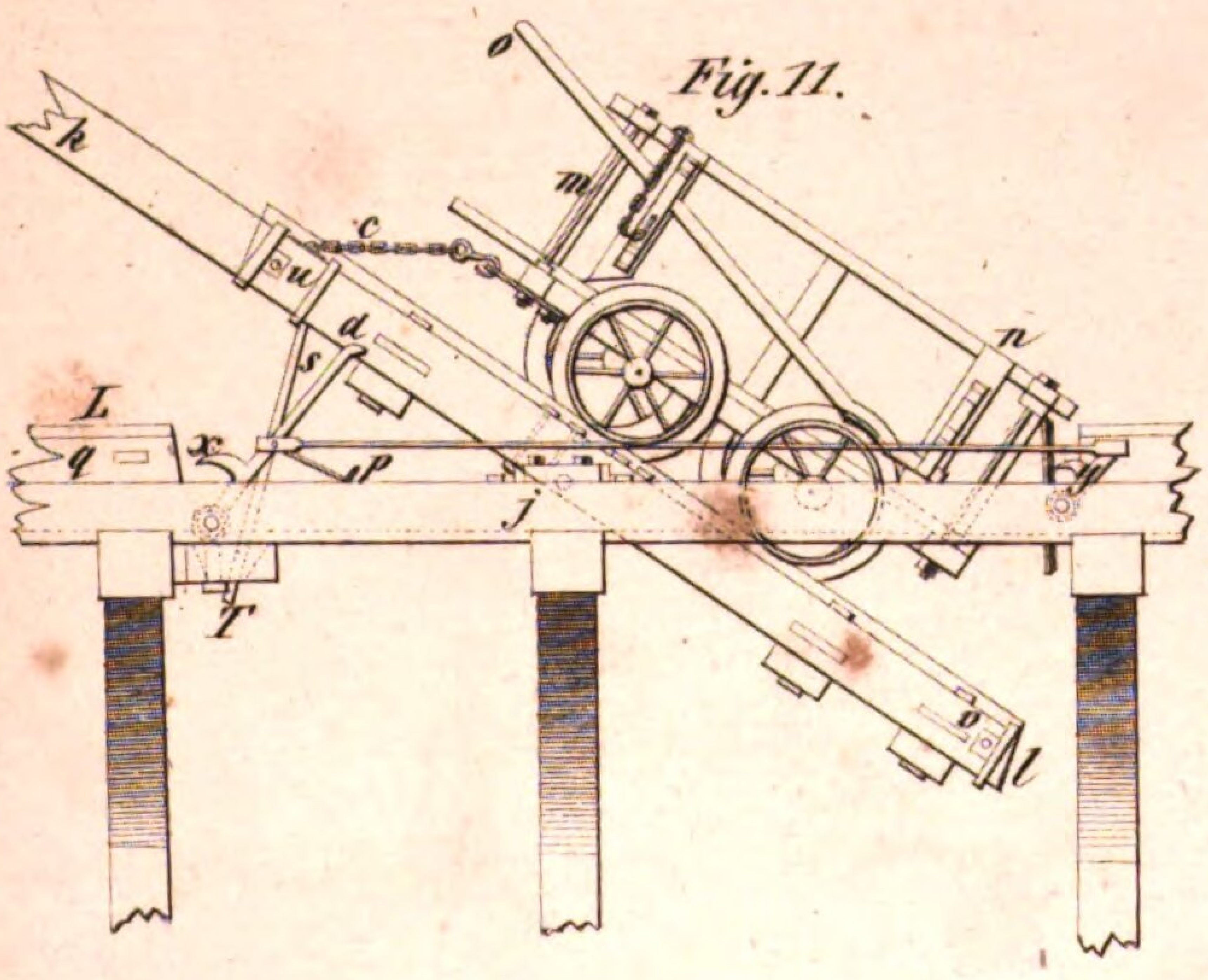
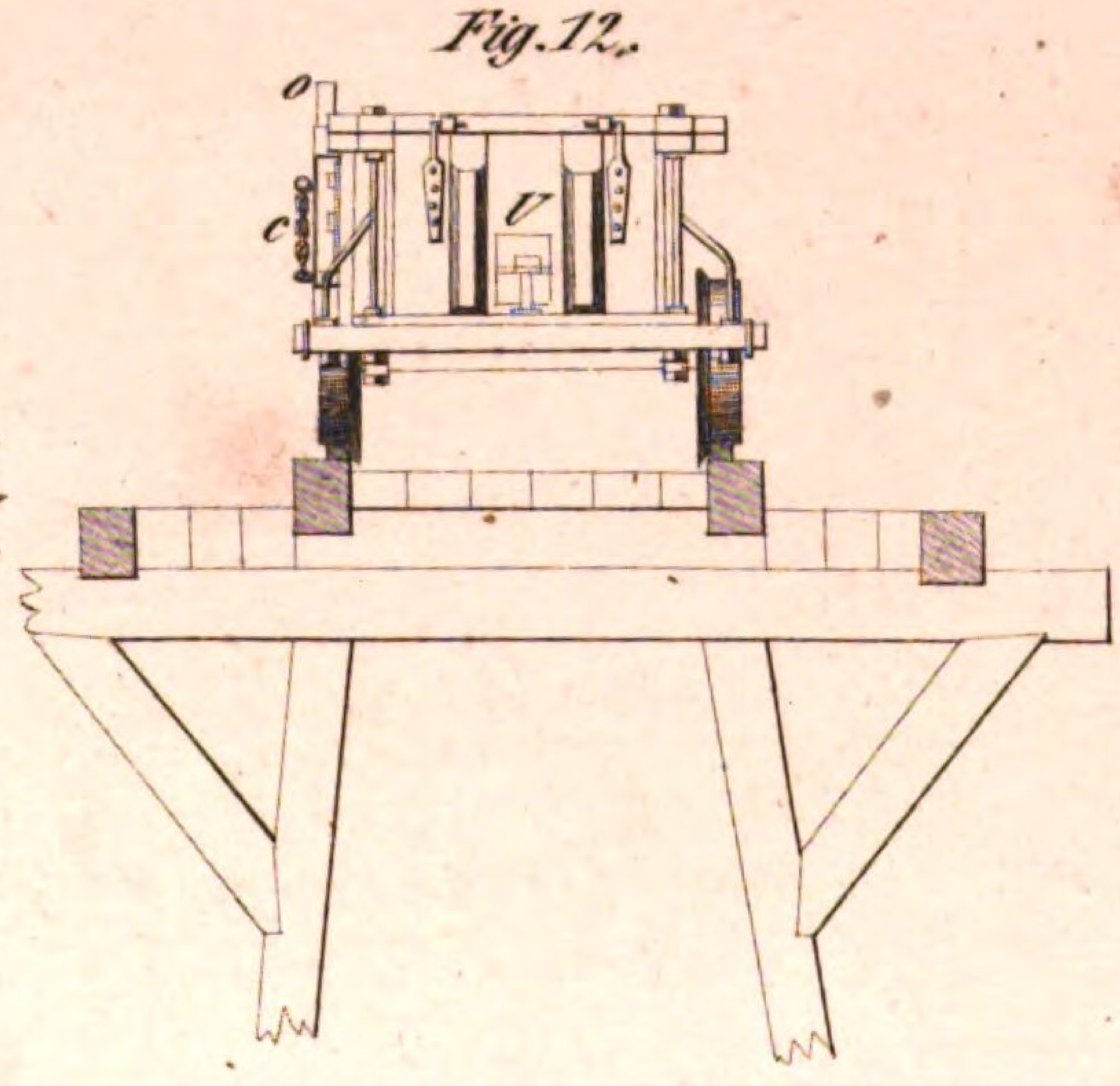
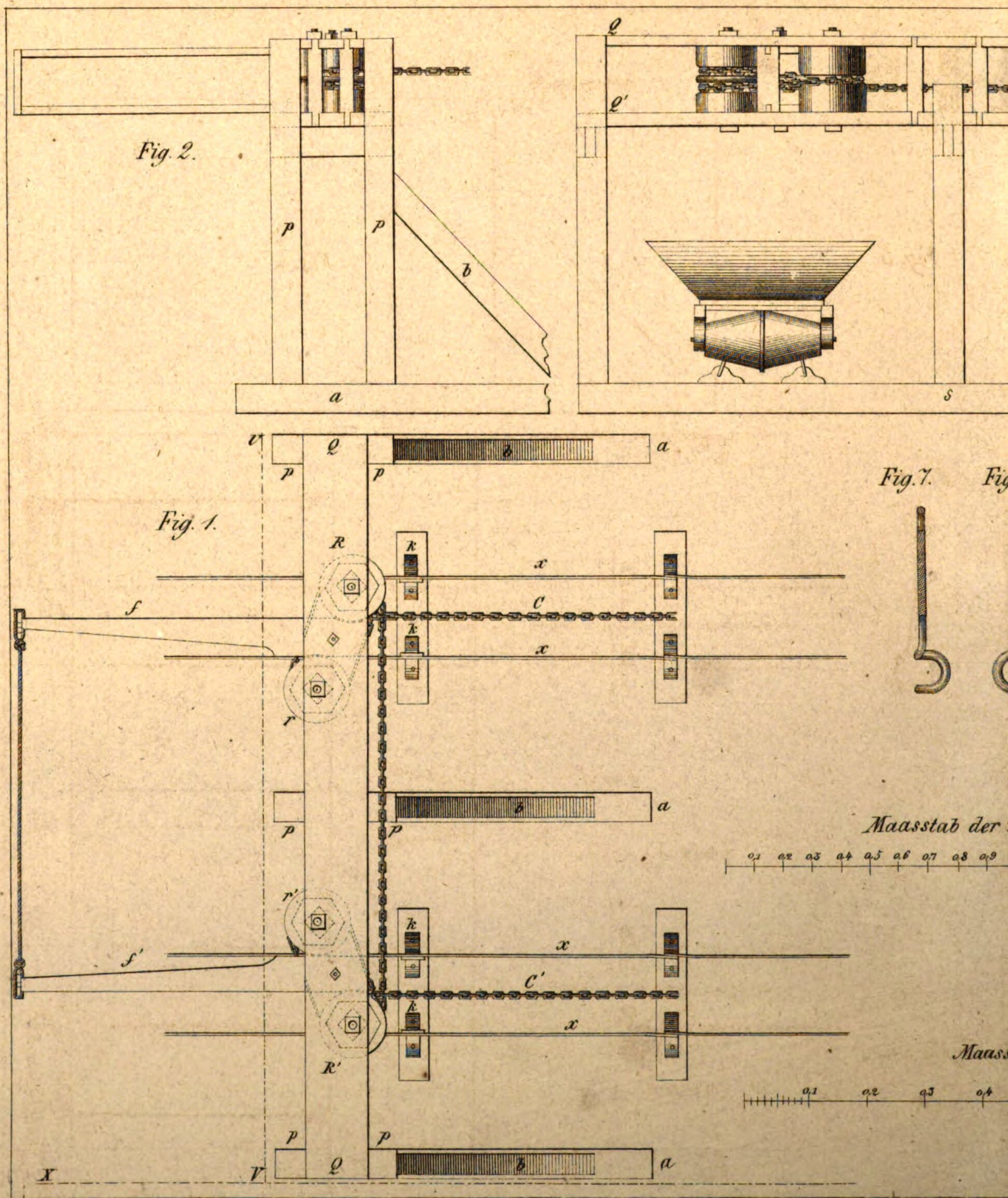


Fig. 12.



Bremsberg in einem Bausteinbr



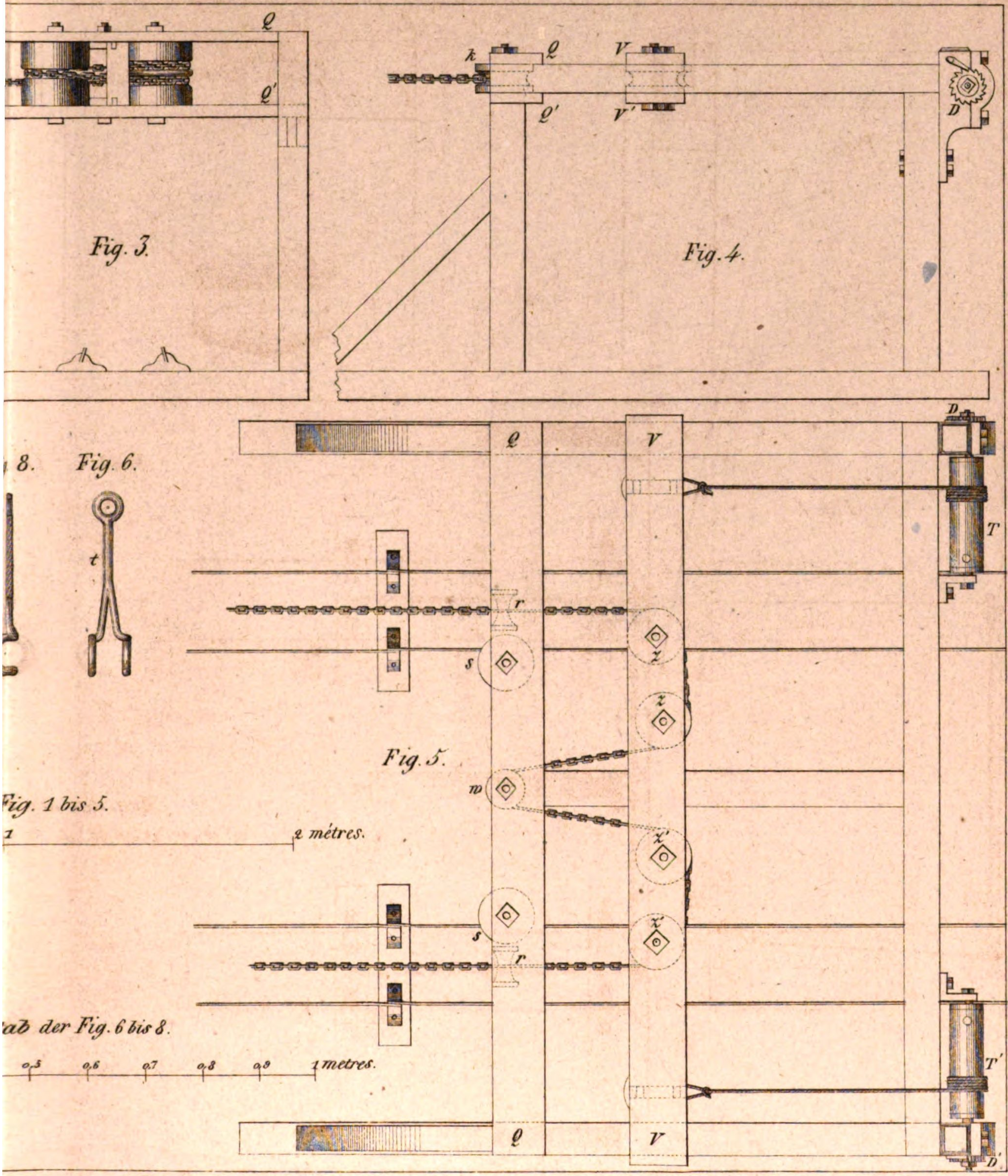


Fig. 3.
Fig. 4.
Fig. 5.
Fig. 6.
8.
Fig. 1 bis 5.
1
2 métres.
ab der Fig. 6 bis 8.
0,5
0,6
0,7
0,8
0,9
1 metres.

Fig. 1.

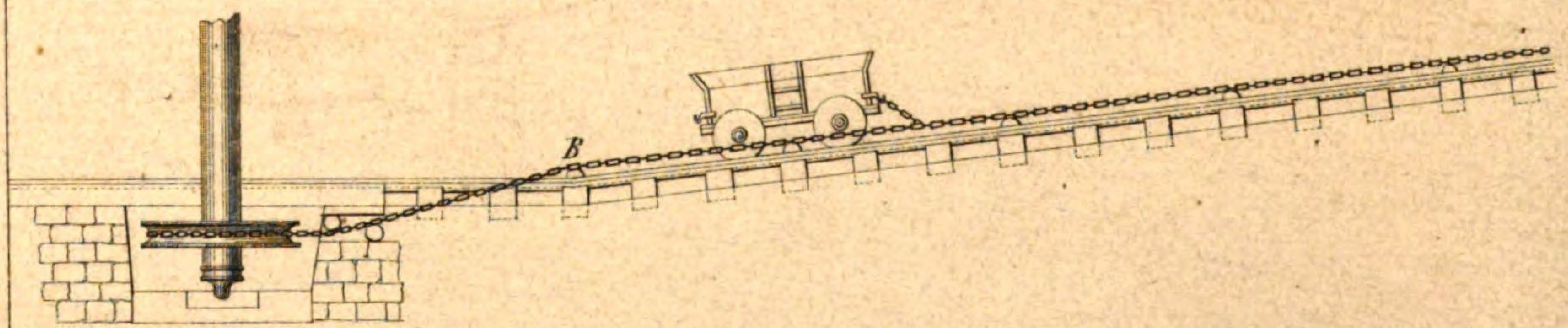
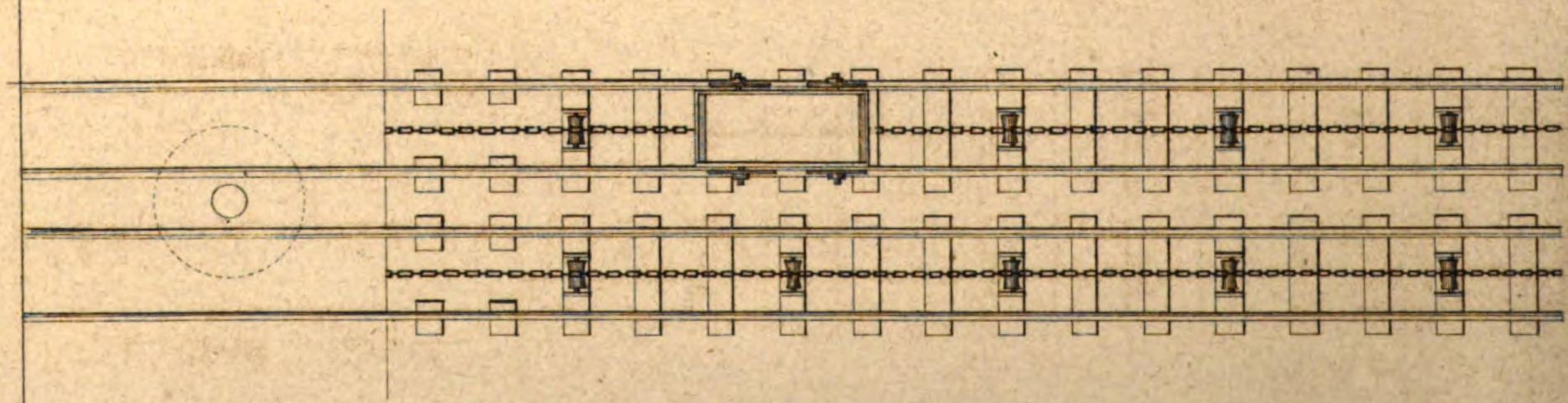


Fig. 2.



Maasstab der Fig. 1 u. 2.

1 2 3 4 5 6 7 8 9 10

Maasstab der Fig. 3.

1 2 3 4 5

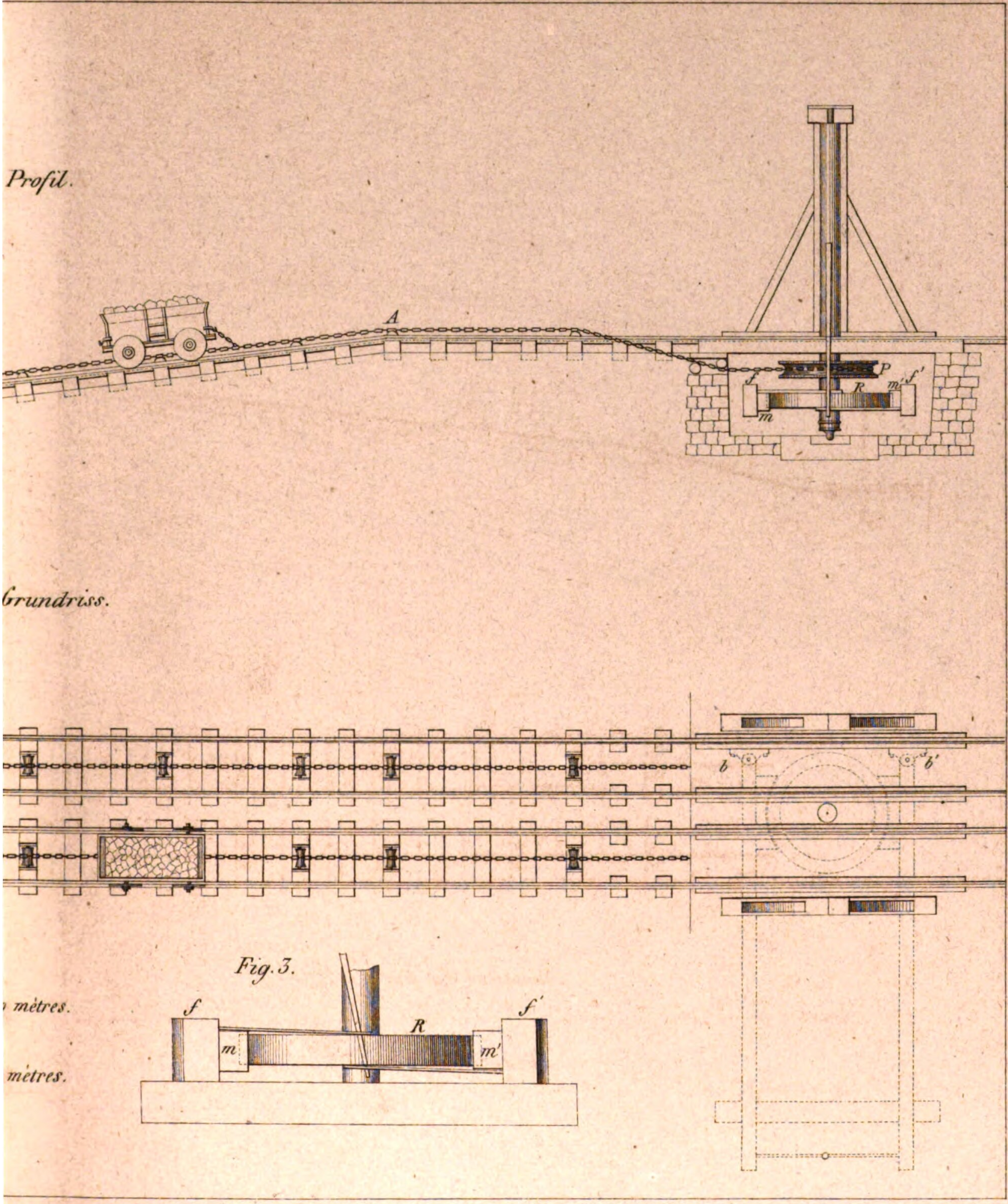
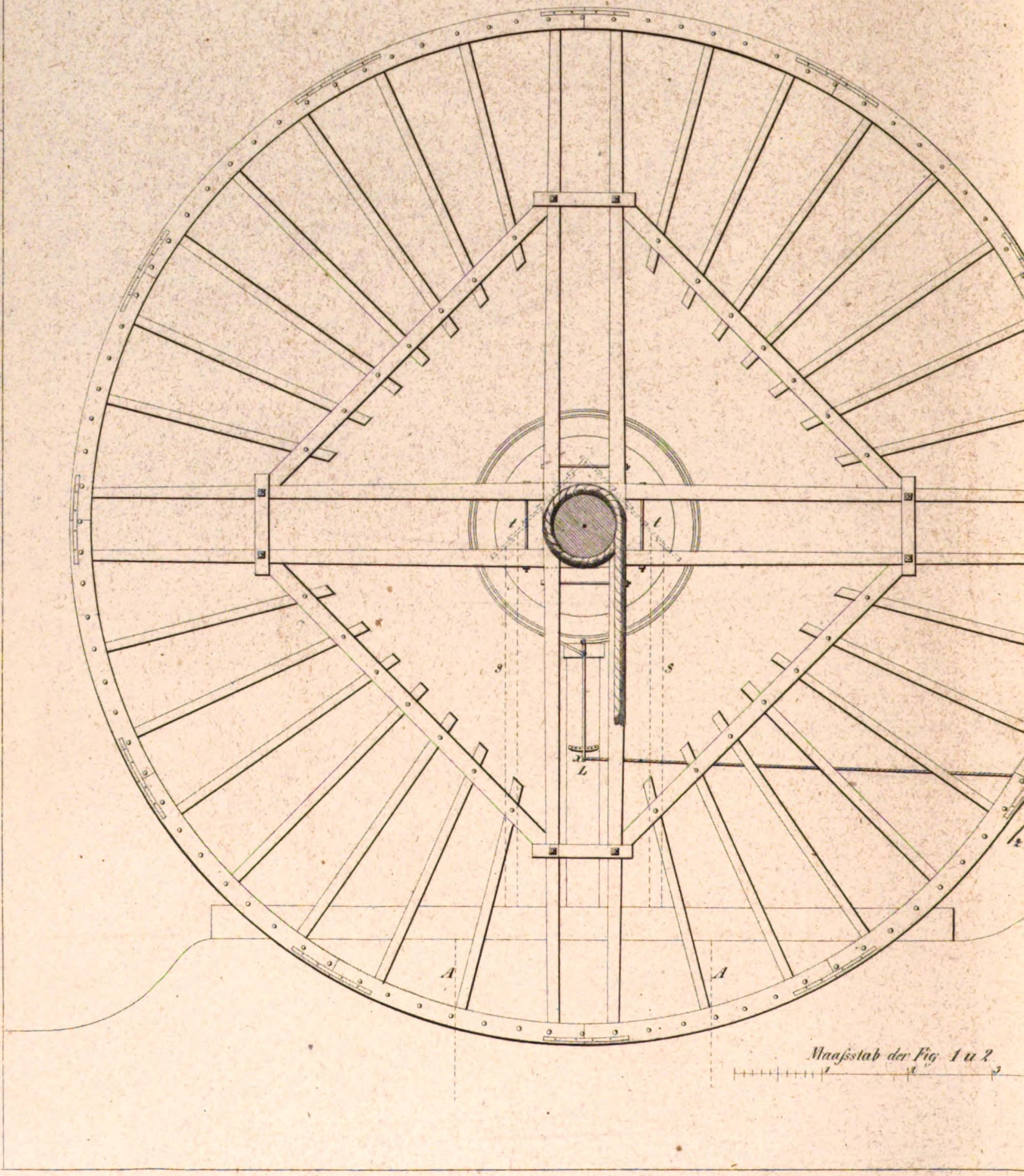
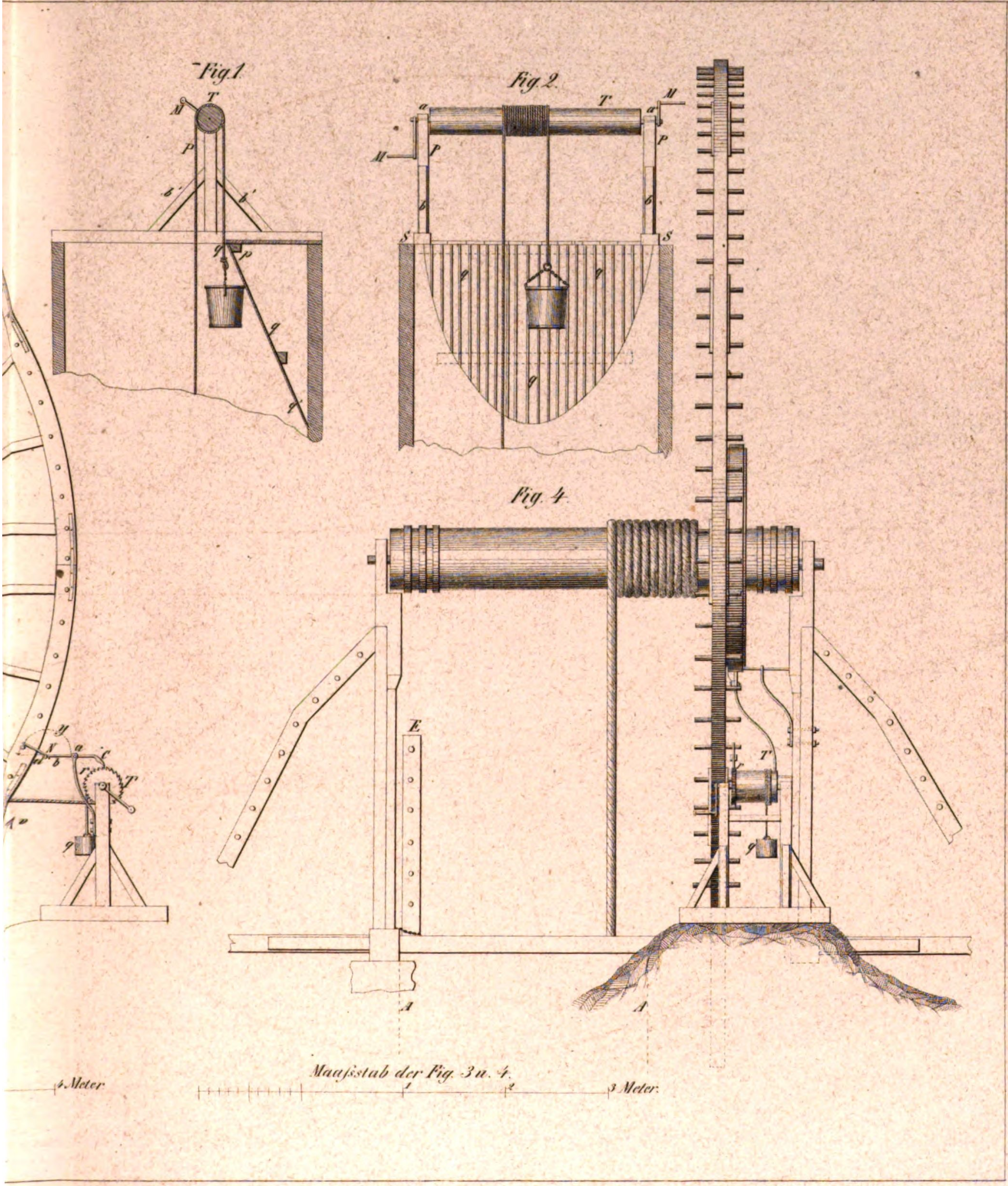

Profil.
A
f
P
m' f'
R
m
b
b'
Grundriss.
Fig. 3.
f
f'
R
m
m'
mètres.
mètres.

Fig. 3.




Fig. 1.
Fig. 2.
Fig. 4.
Maaßstab der Fig. 3 u. 4.
1
2
3 Meter.
4 Meter.

Gewöhnlicher Pferdegöpel in

Fig. 1

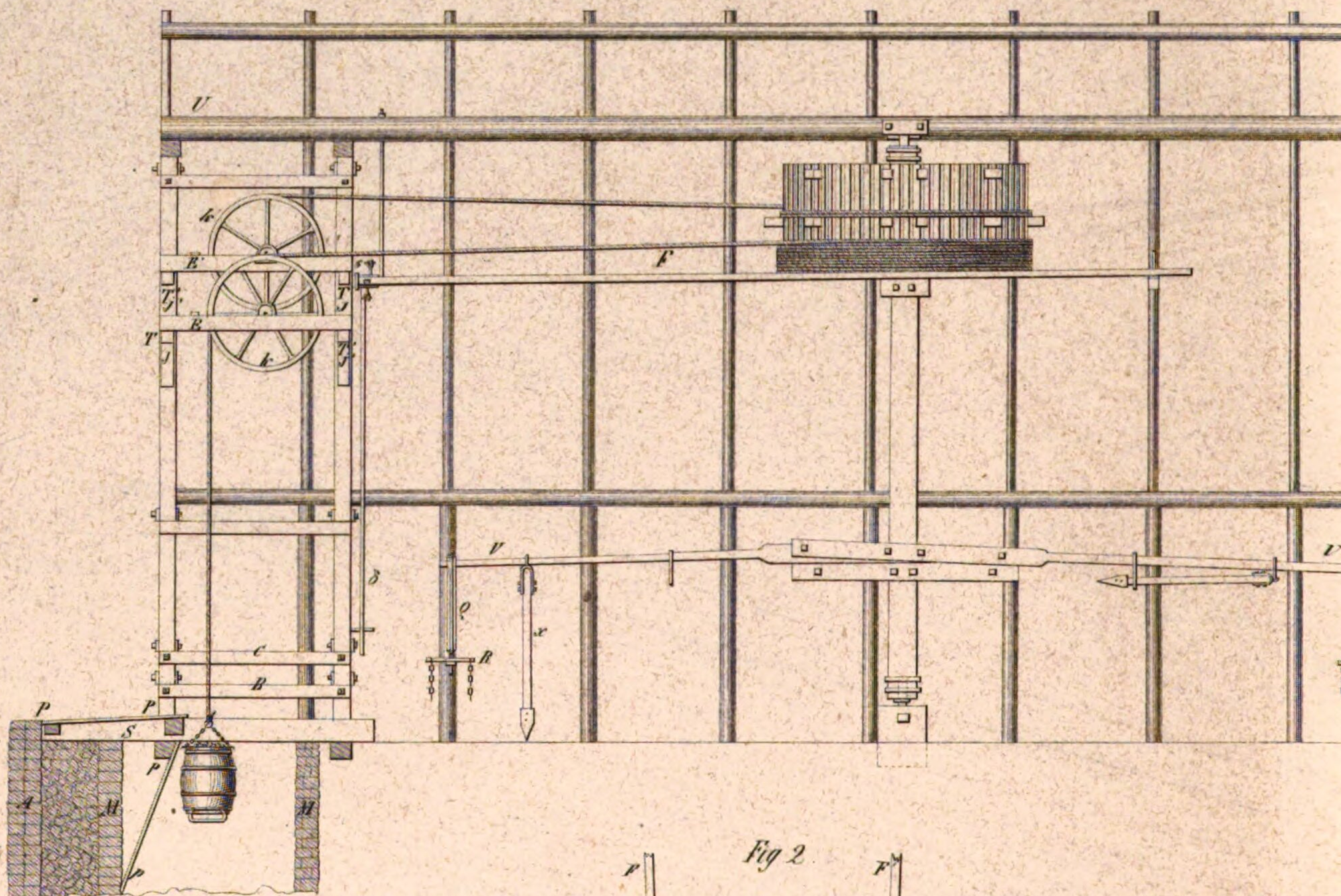


Fig. 2

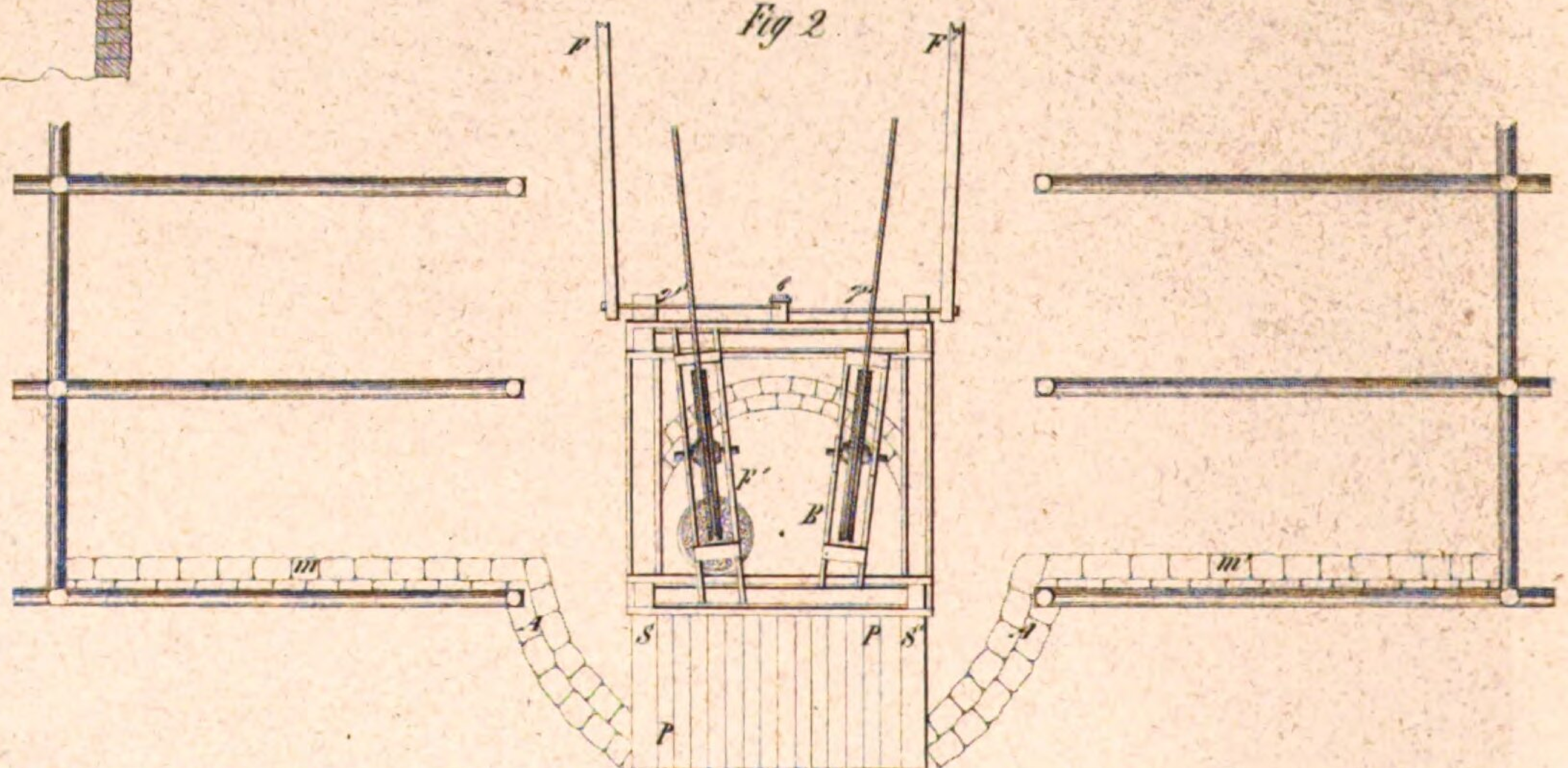




Fig 3.

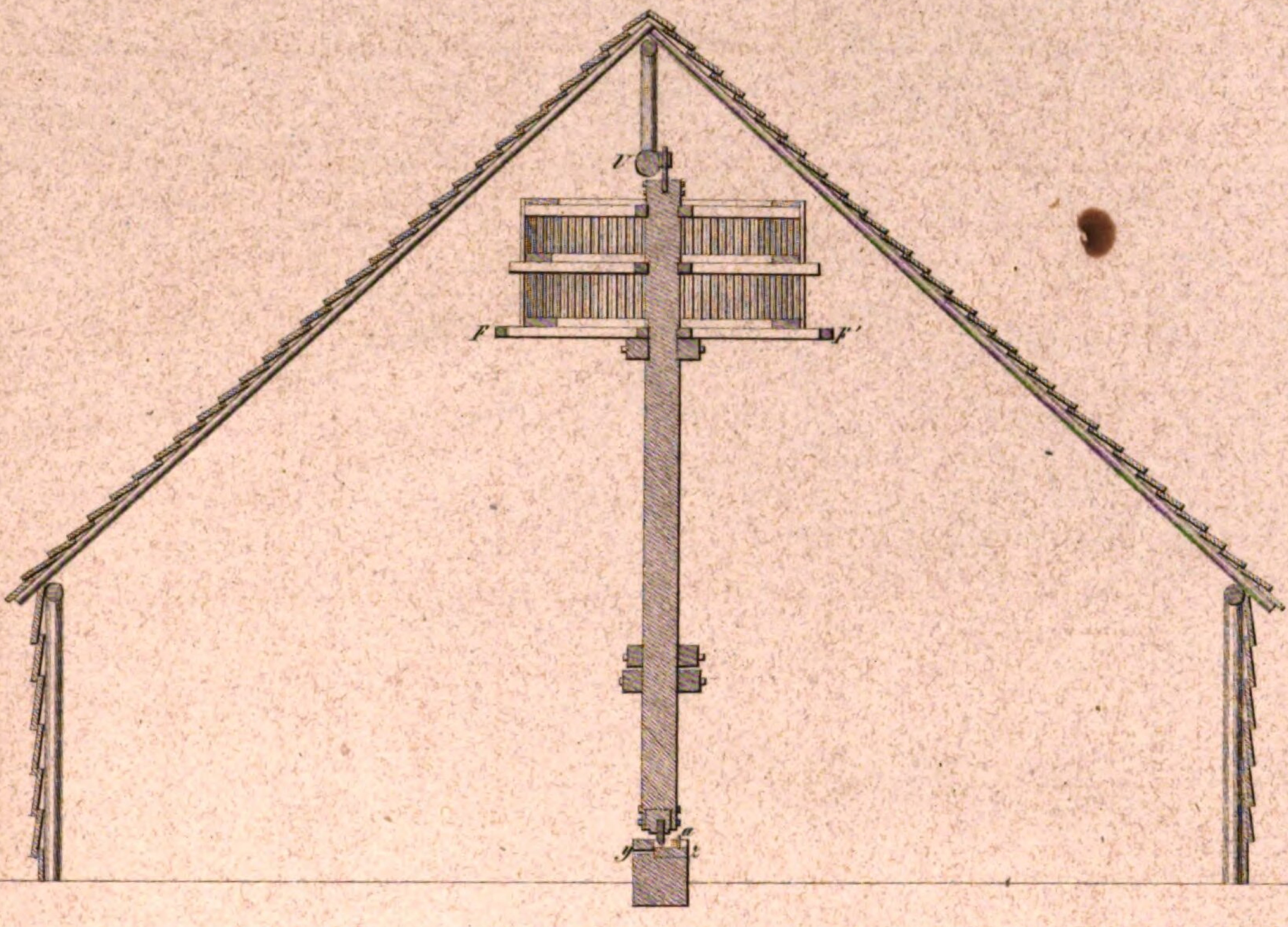


Fig 4.

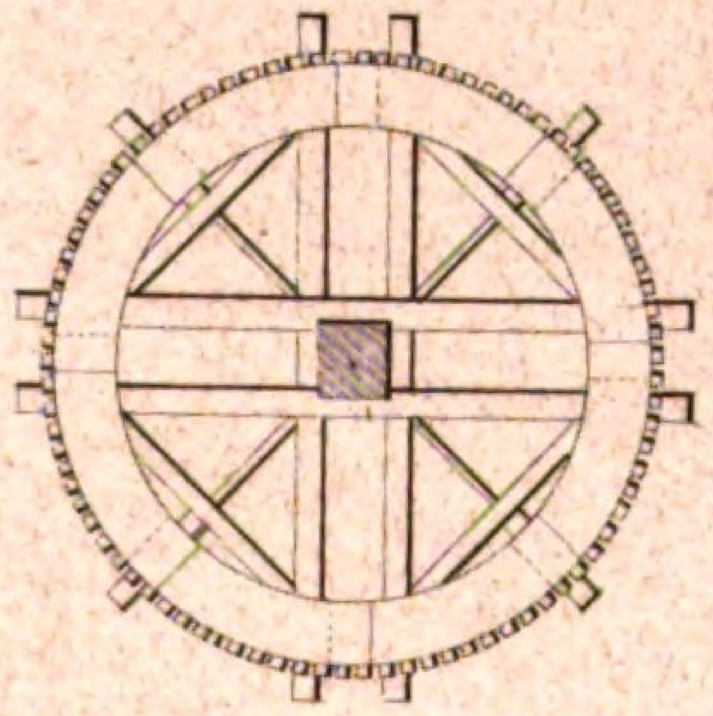


Fig 5.



Fig 7.

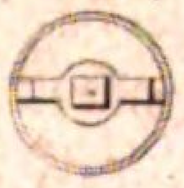
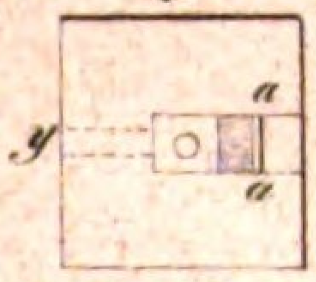


Fig 6.



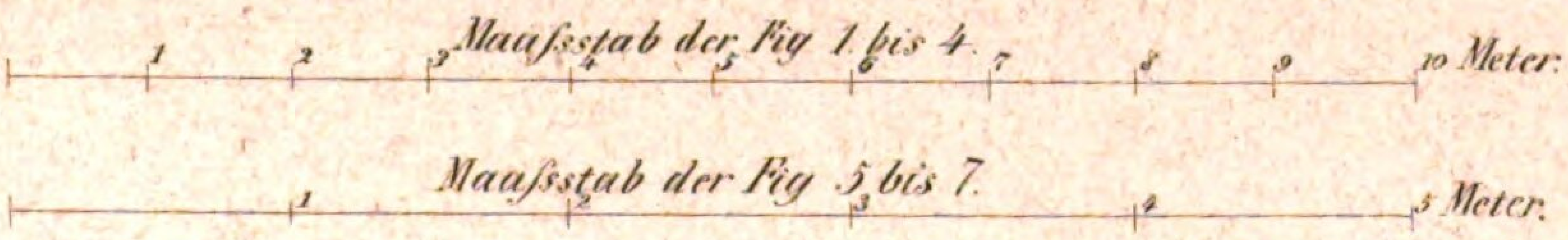


Fig. 1.

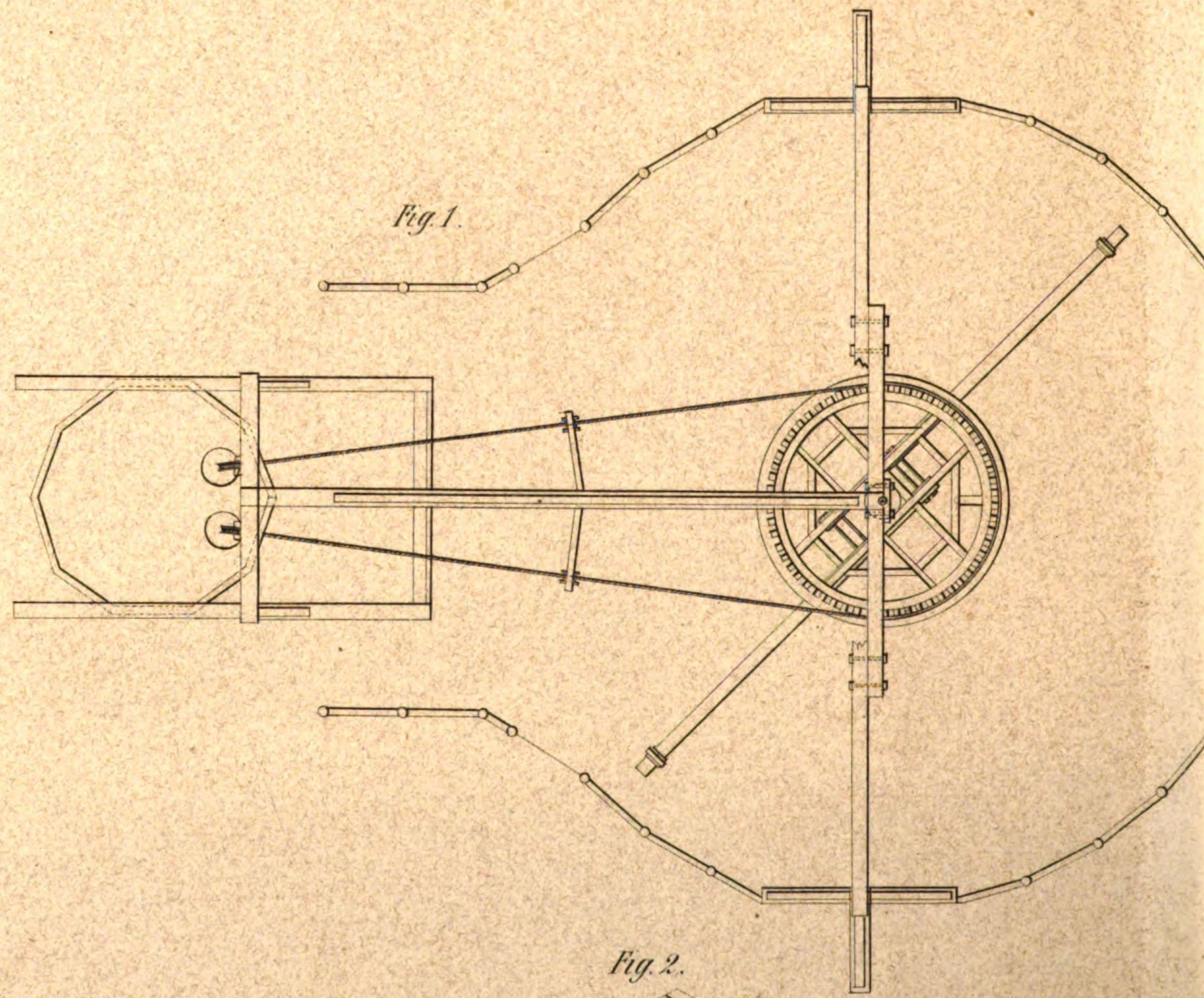


Fig. 2.

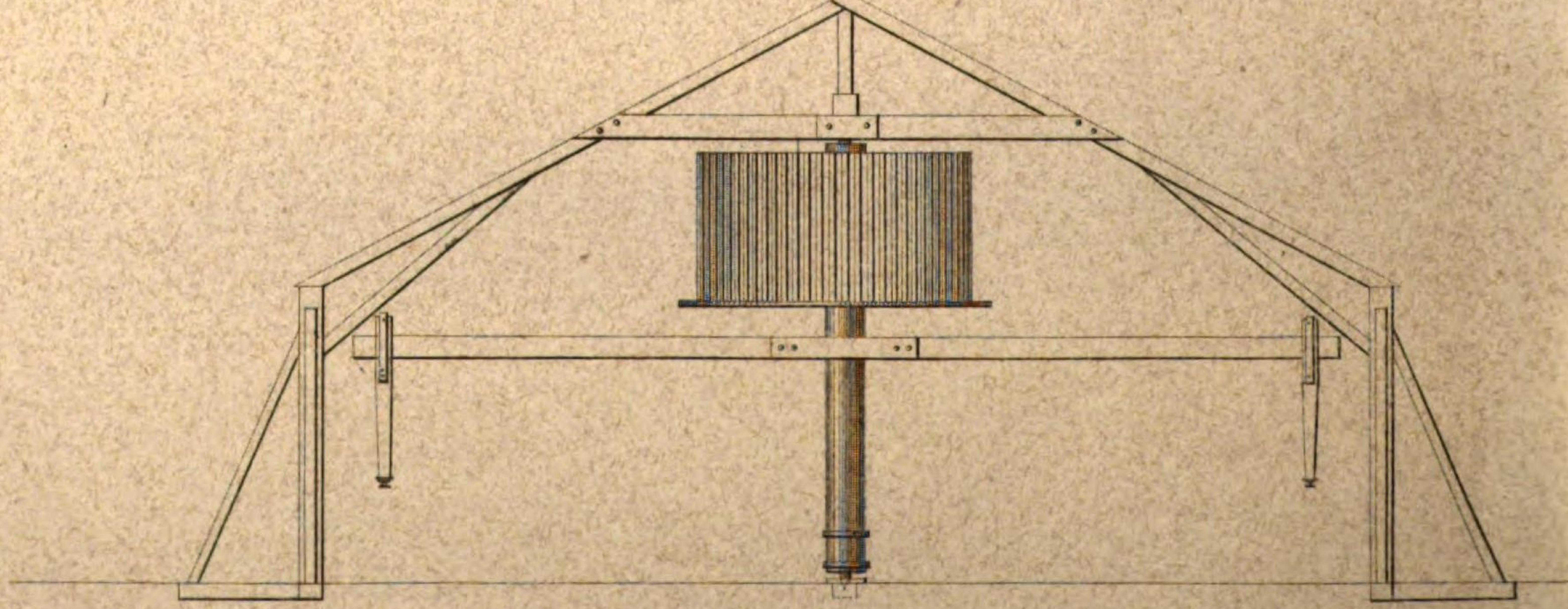


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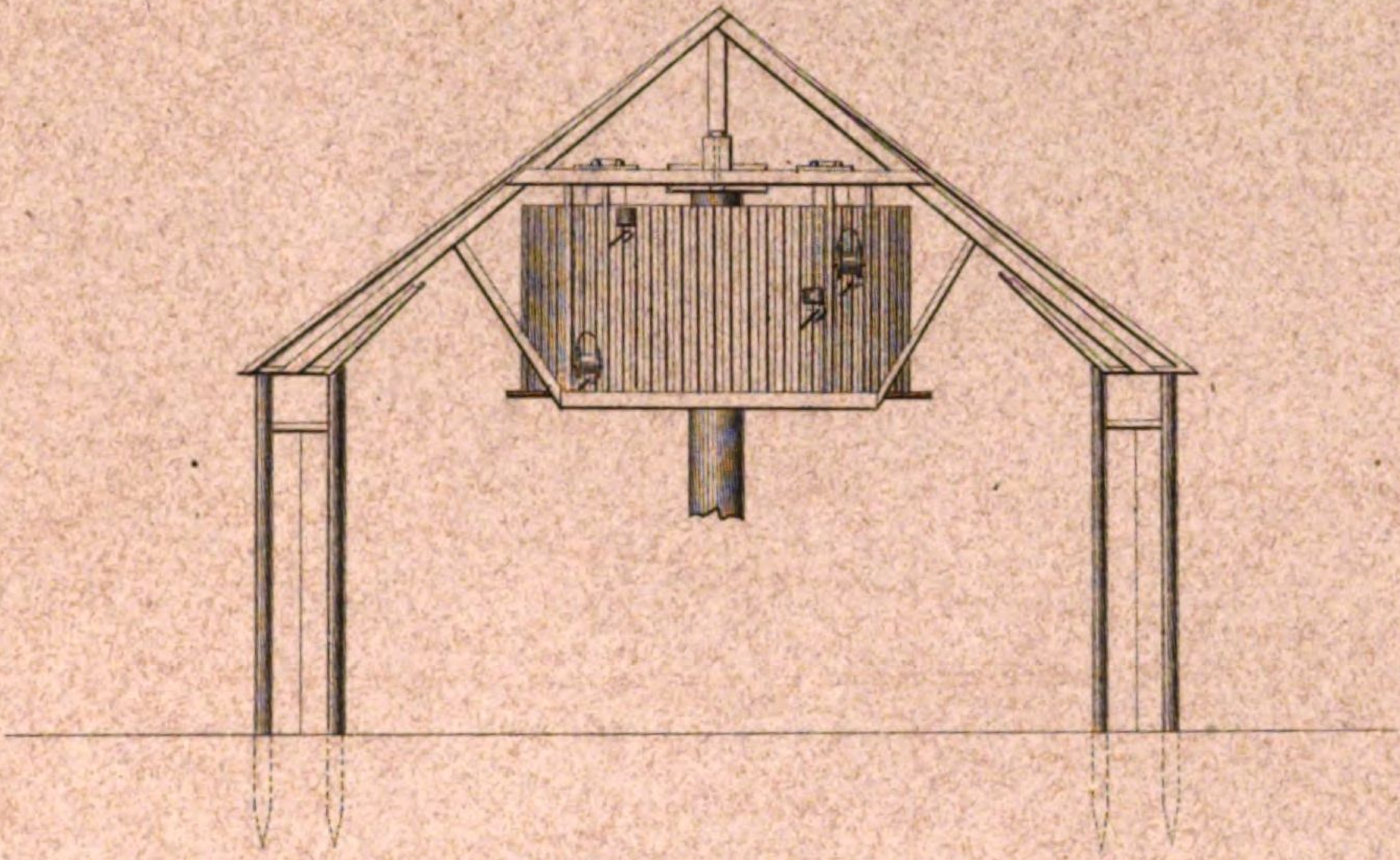


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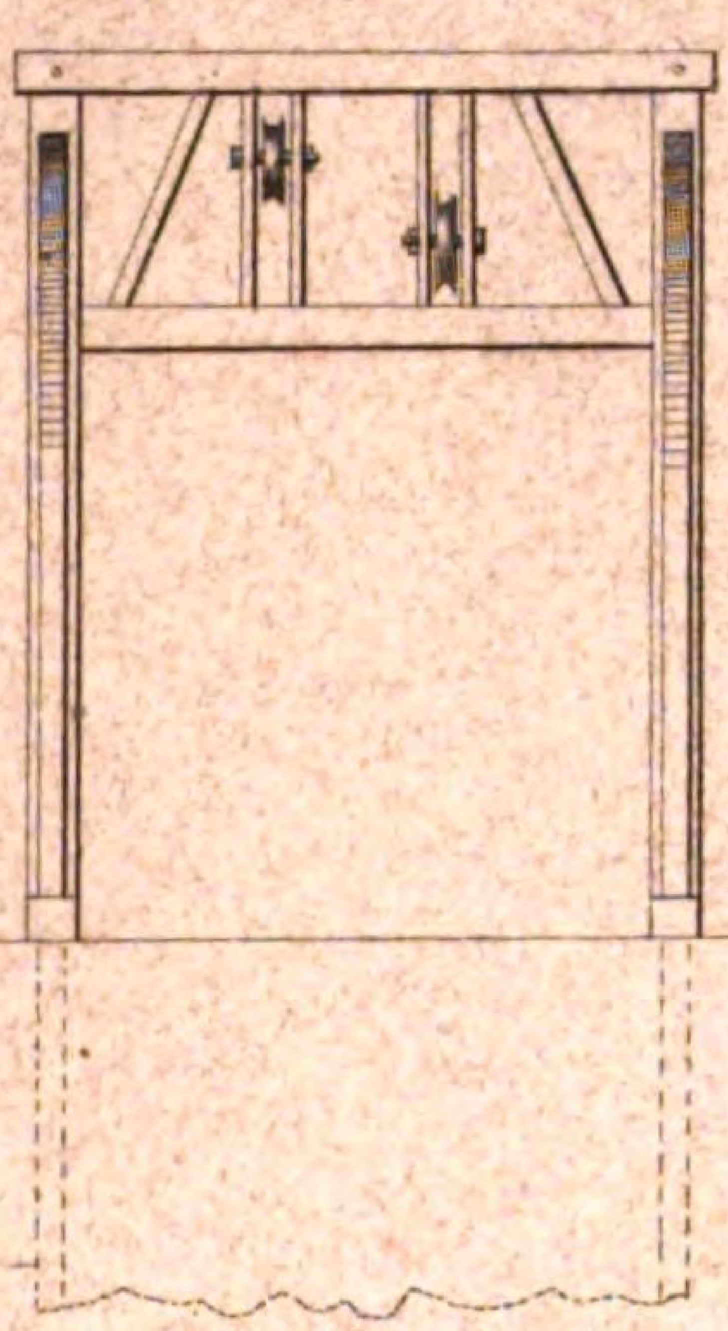
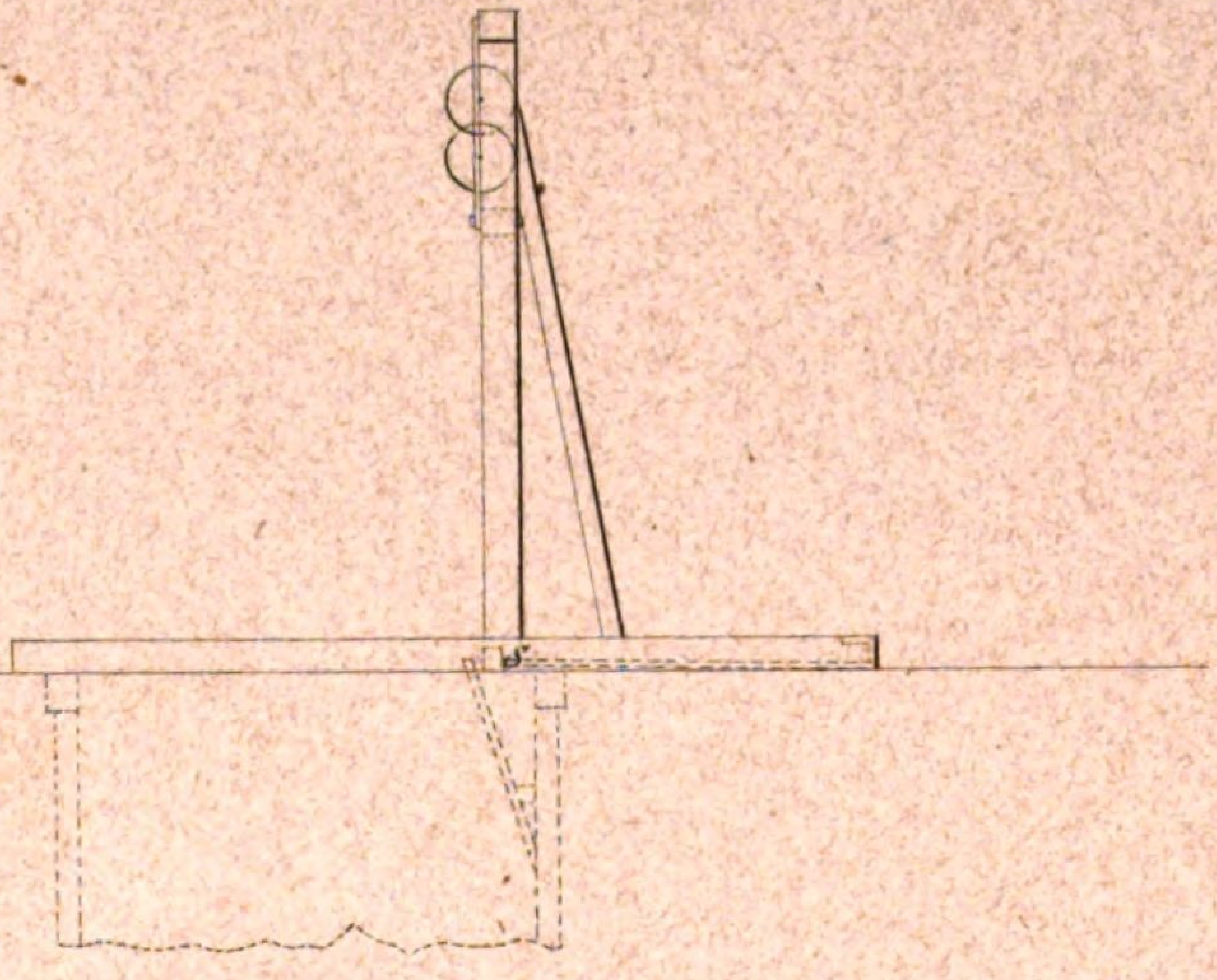


Fig. 5.



Maaßstab der Fig. 1. bis 5.





Fig. 1.

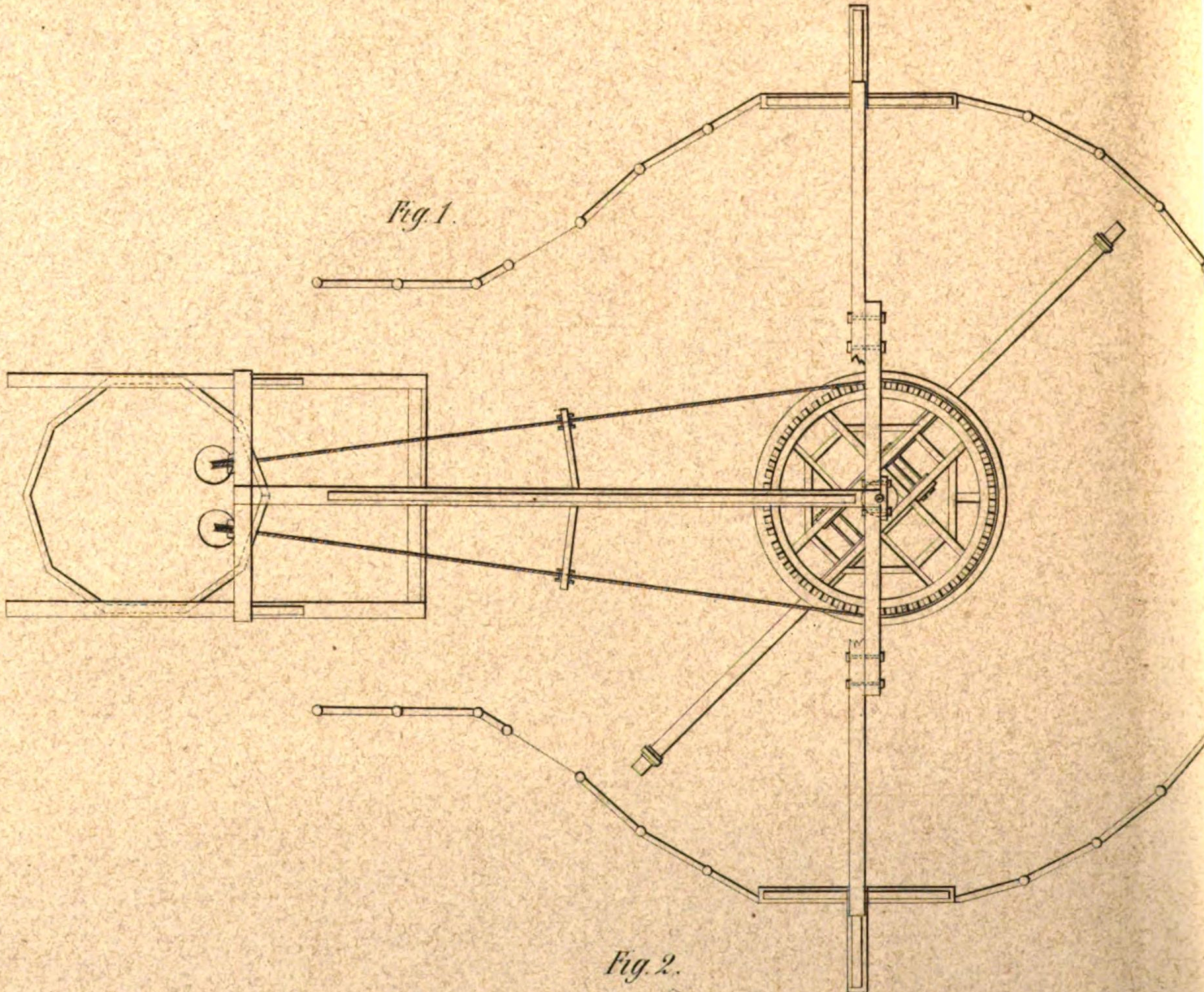


Fig. 2.

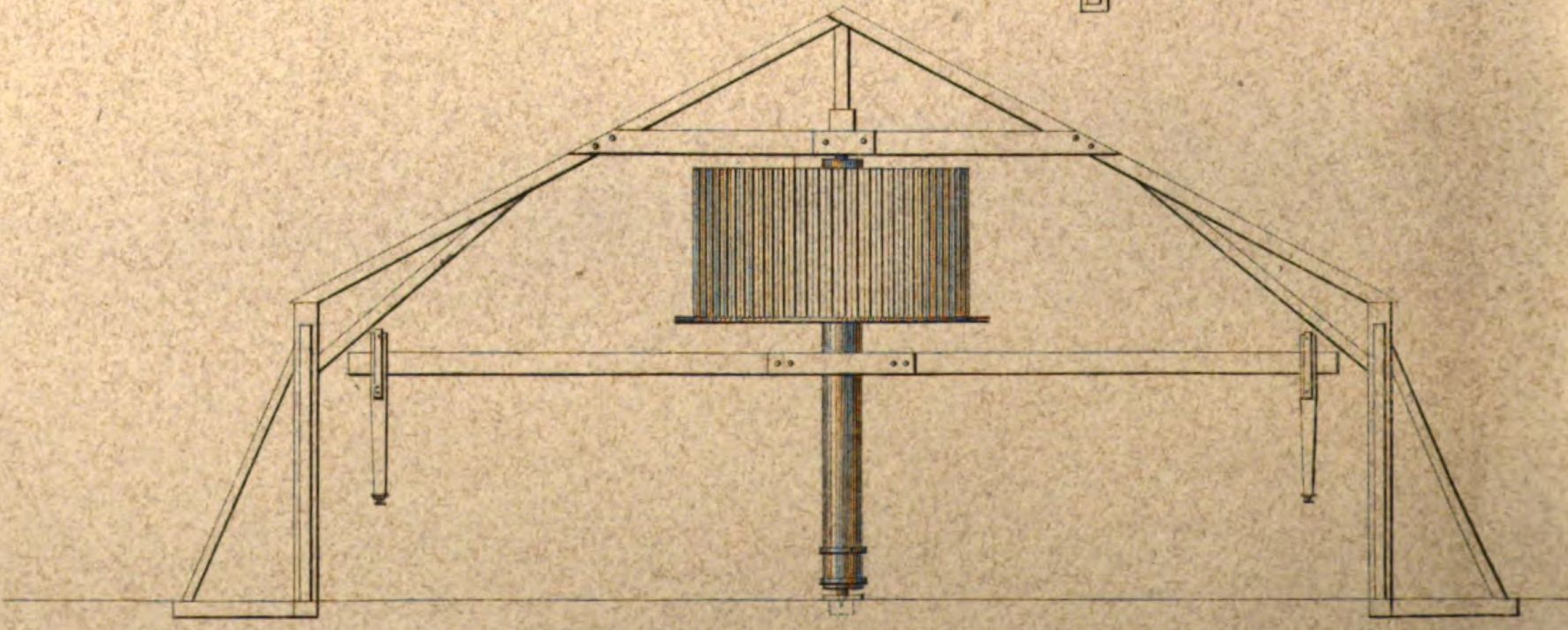




Fig. 3.

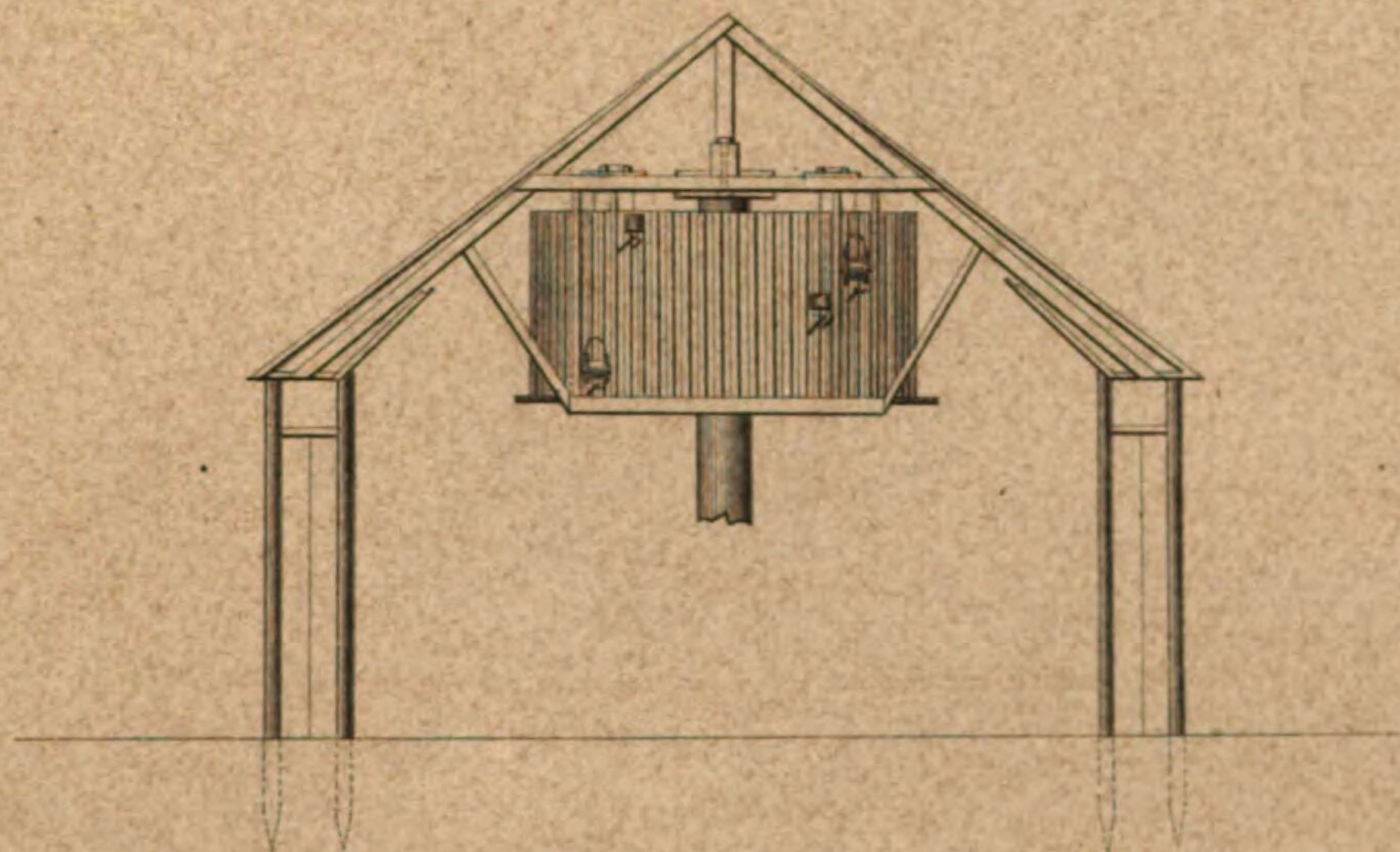


Fig. 4.

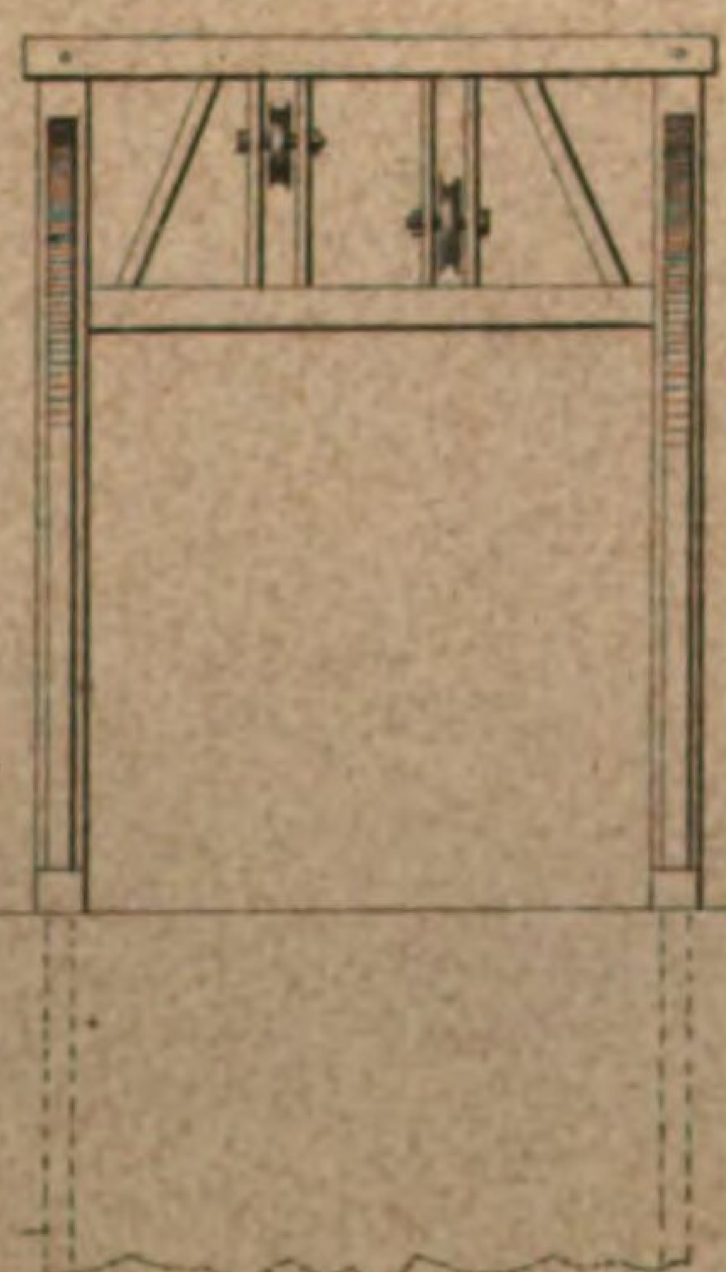
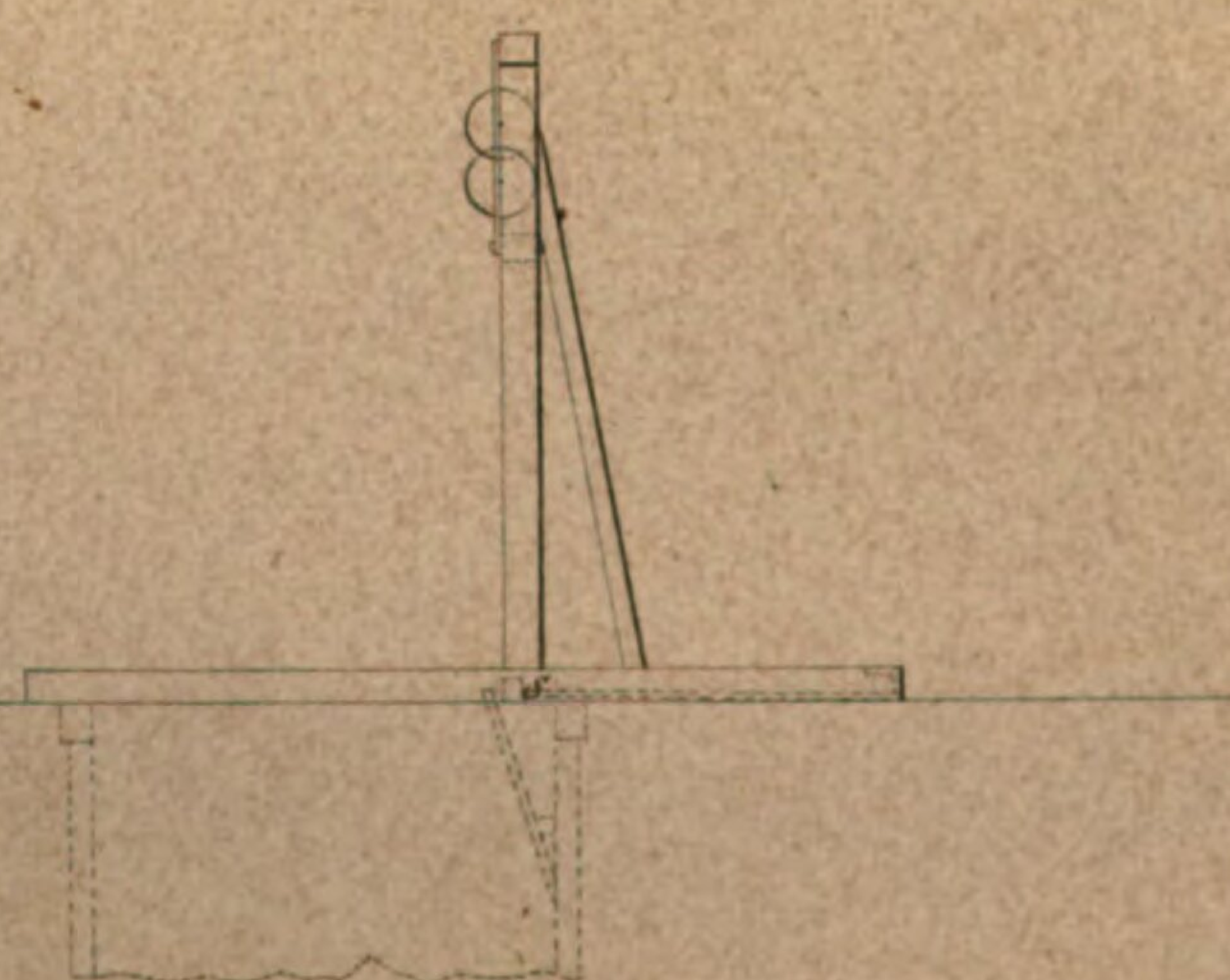


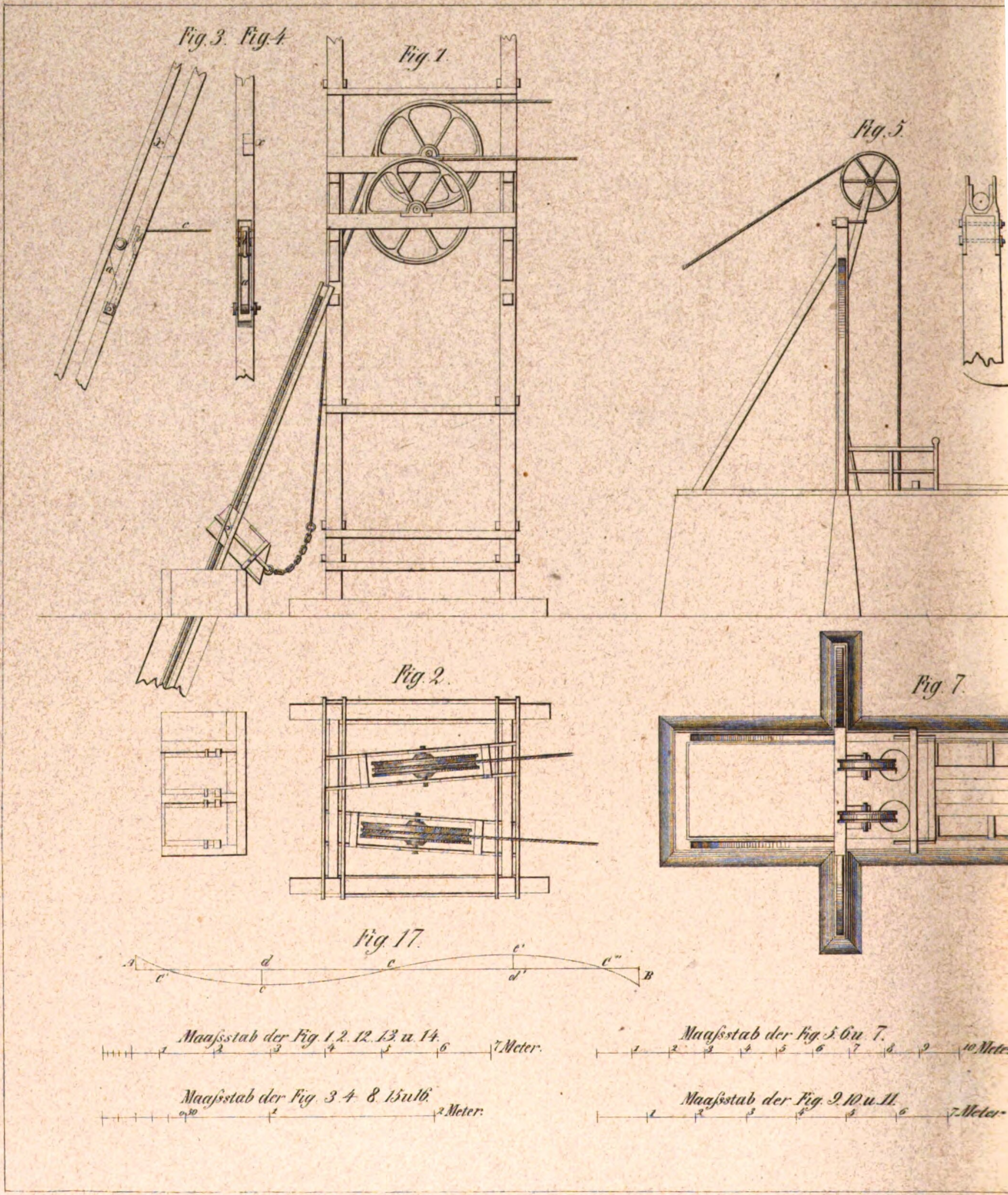
Fig. 5.



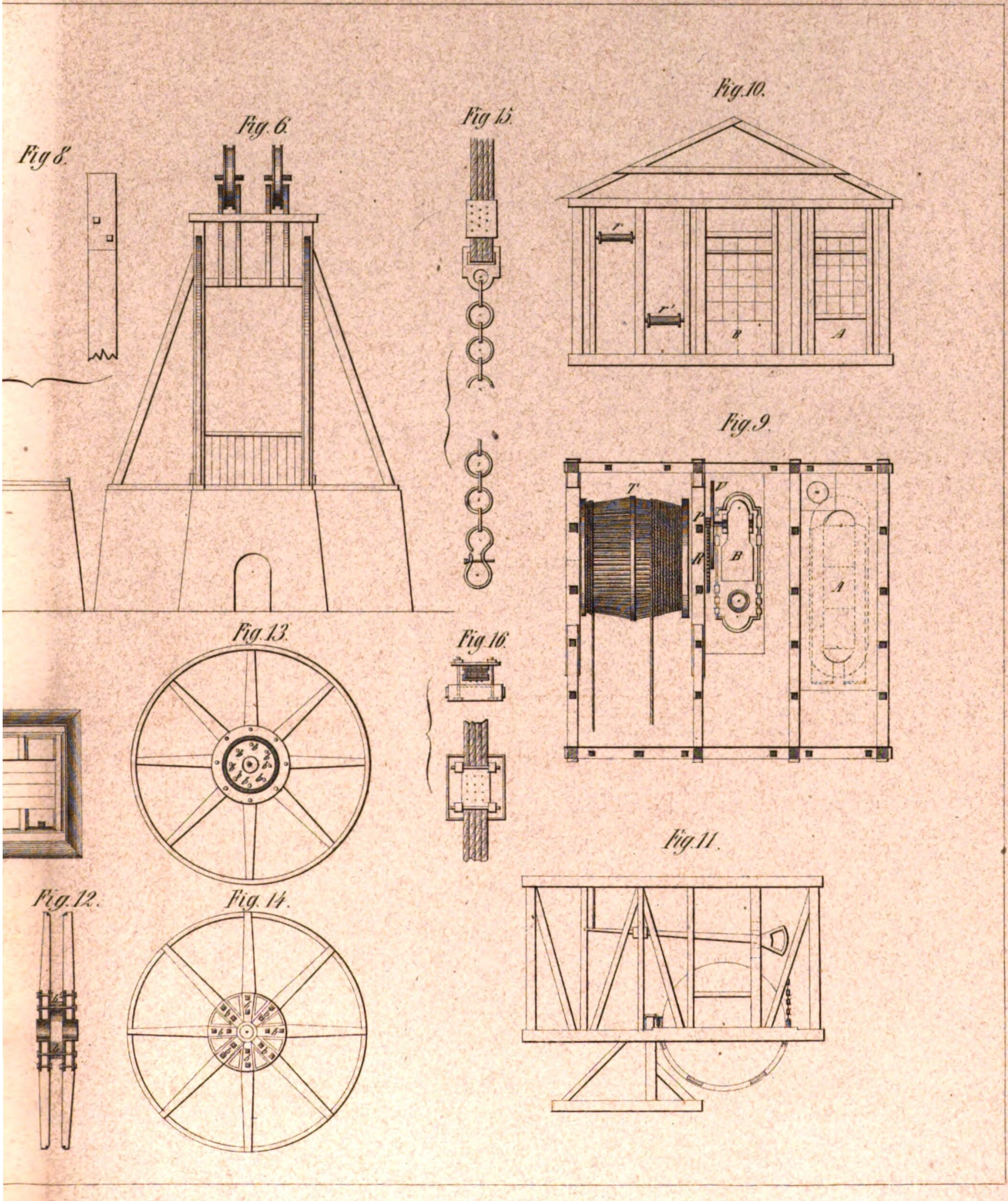
Maafsstab der Fig. 1 bis 5.

1 2 3 4 5 10 Meter.

Seilscheibengerüst, flache



37


Fig 8.
Fig.6.
Fig 15.
Fig.10.
r
r'
B
A
Fig.9.
T
V
P
R
B
A
Fig.13.
Fig.16.
Fig.11.
Fig.12.
Fig.14.

Wassergöpel. — Maschine z

Fig. 1.

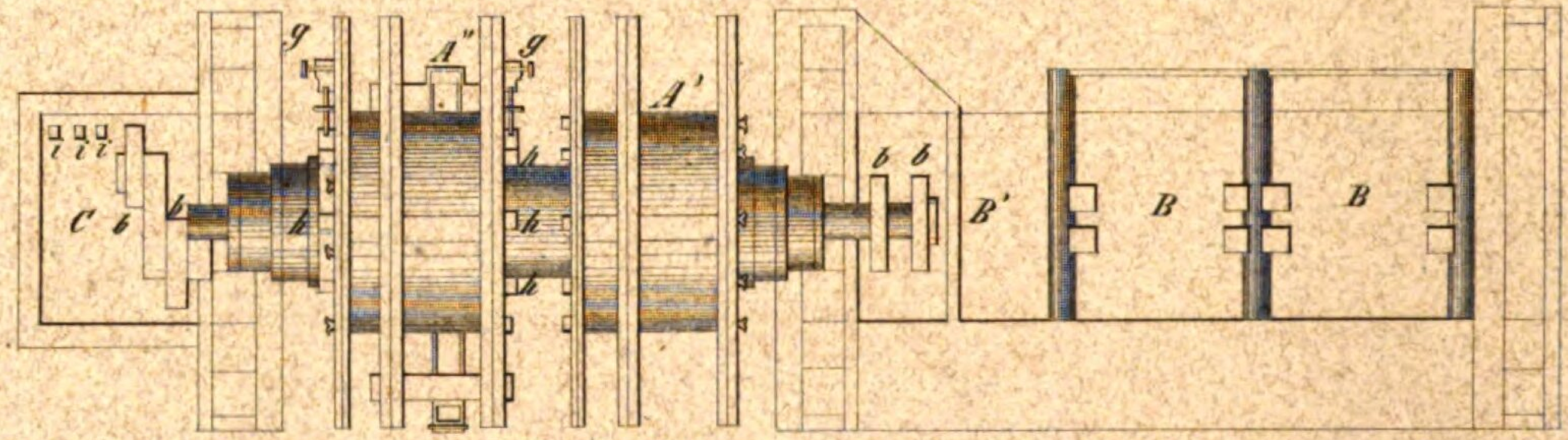


Fig. 2.

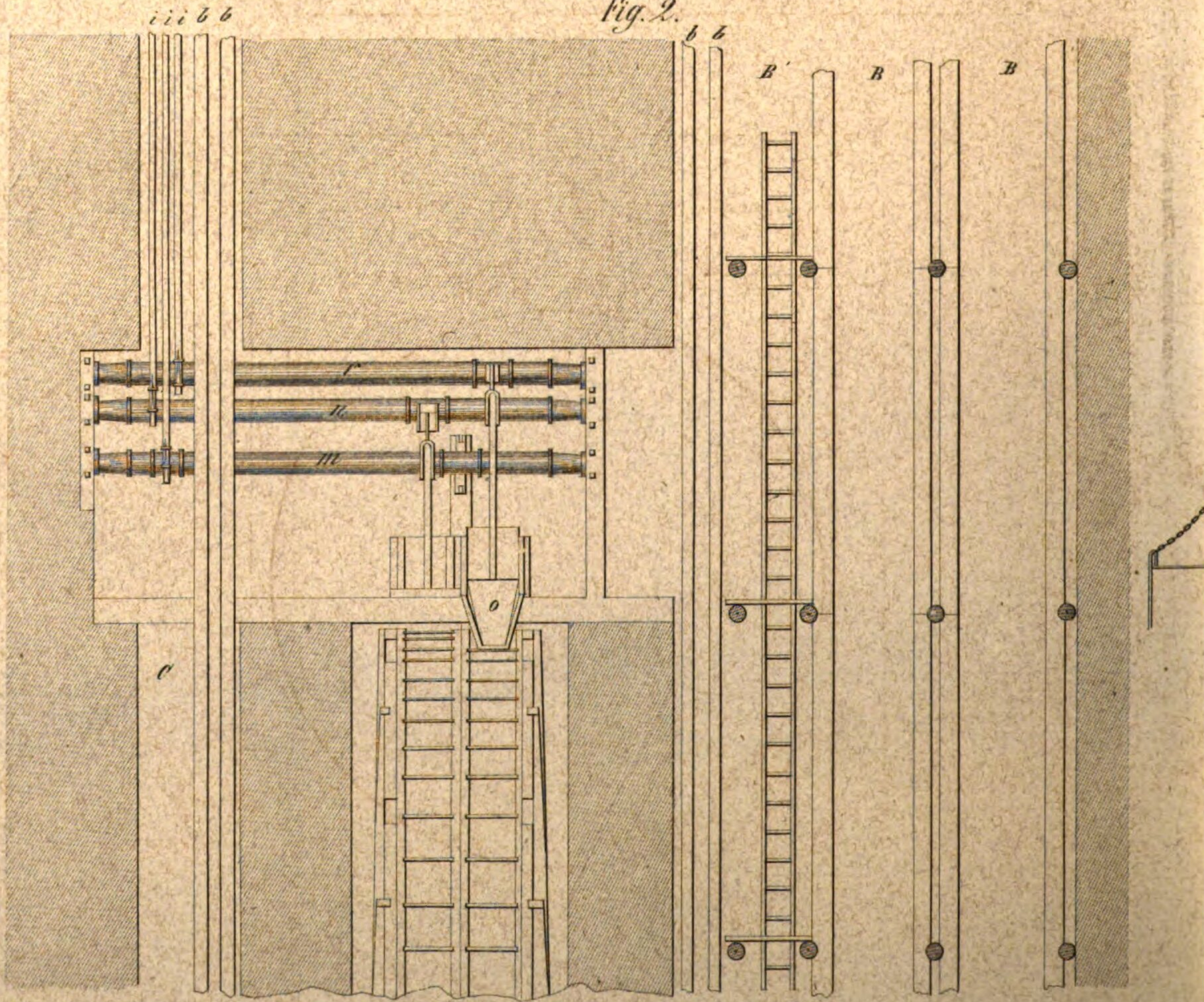


Fig. 5.

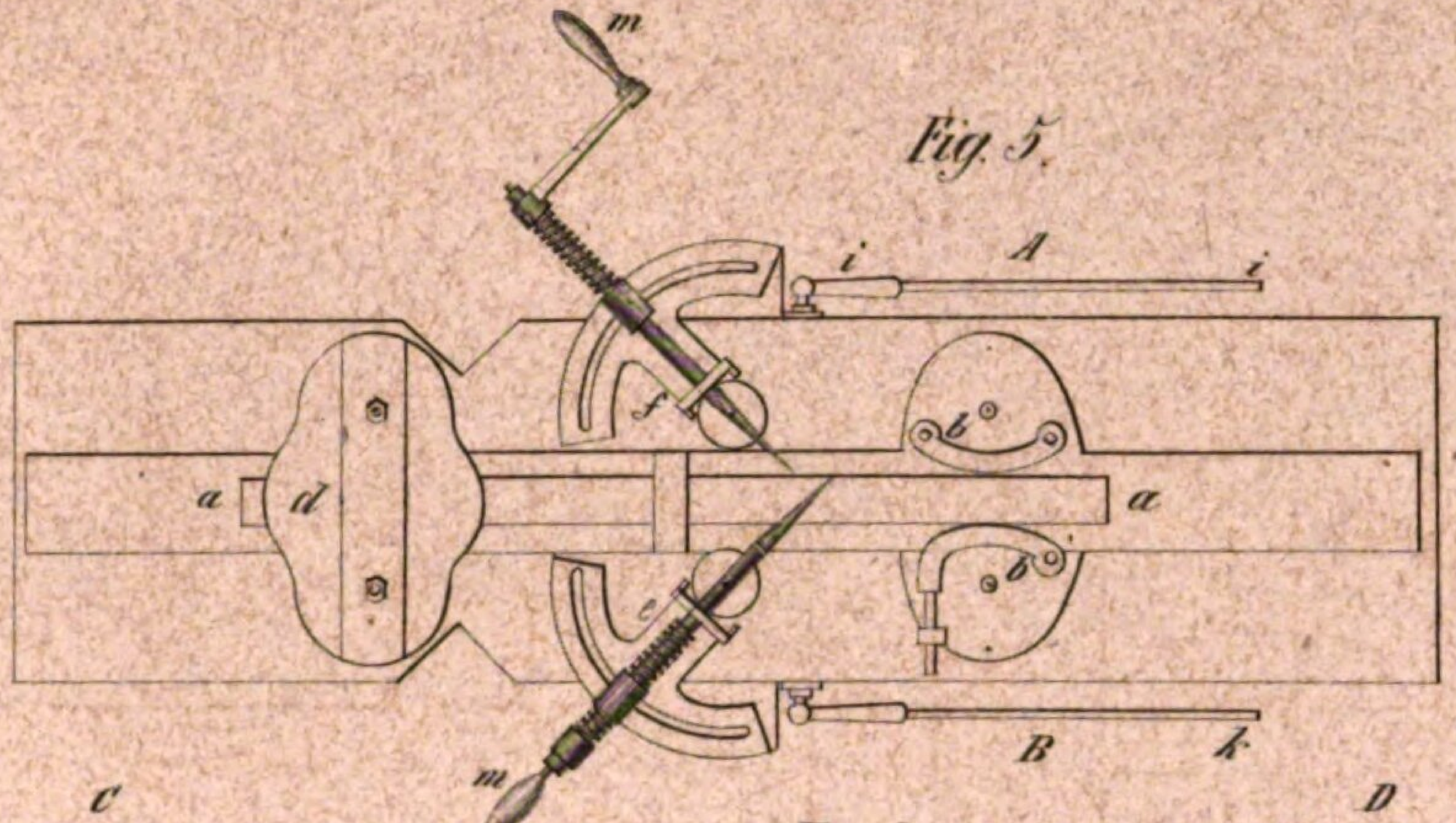


Fig. 7.

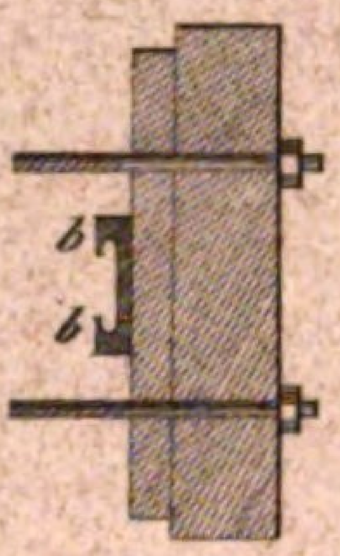


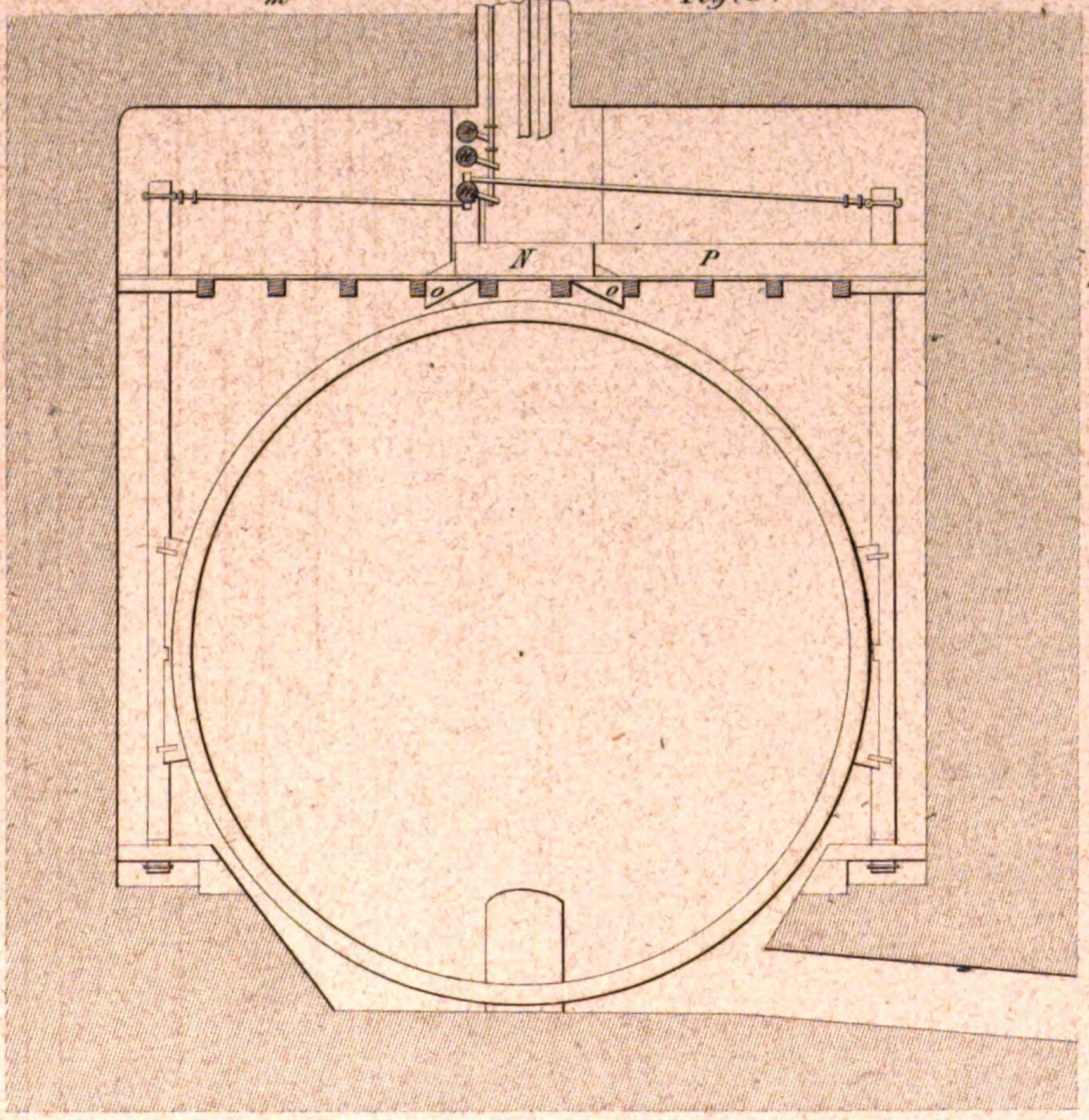
Fig. 4.



Fig. 6.



Fig. 3.



Förderungs-Dampfmaschi

Fig. 1.

Senkrechter Durchschnitt u. Aufriss nach A. B. Fig. 2.

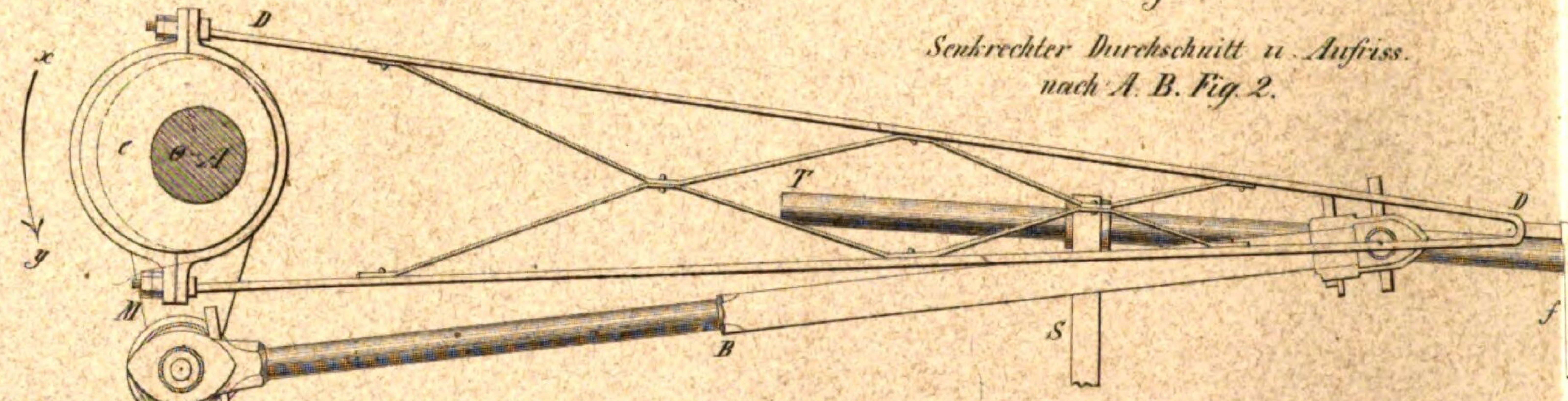


Fig. 2.

Grundriss.

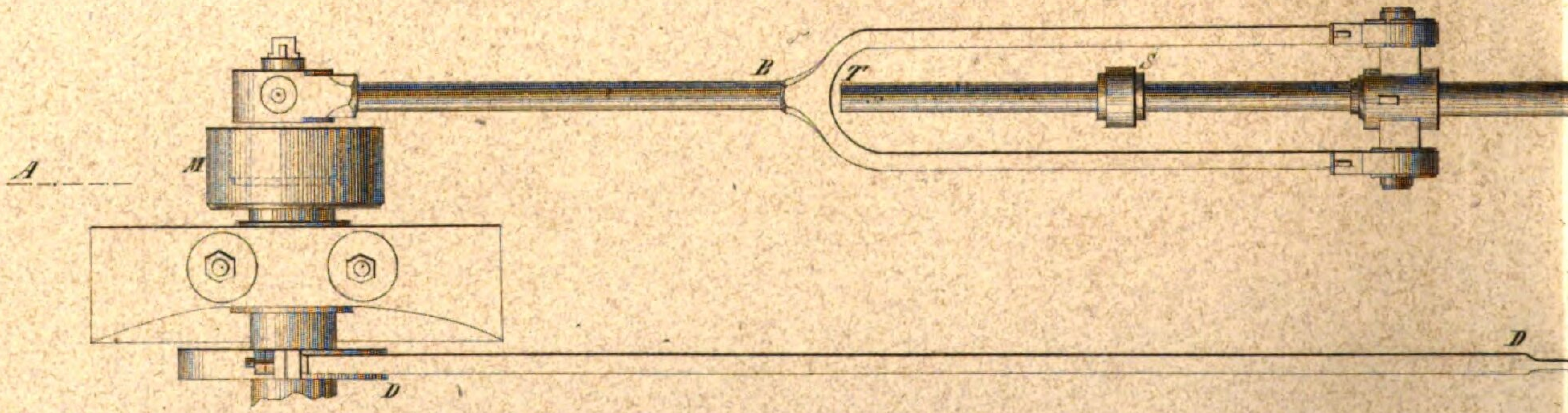


Fig. 5.

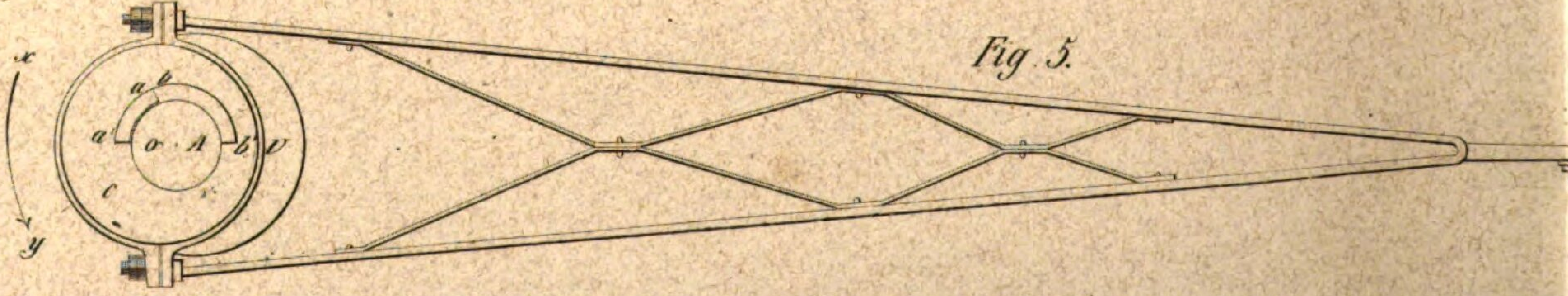
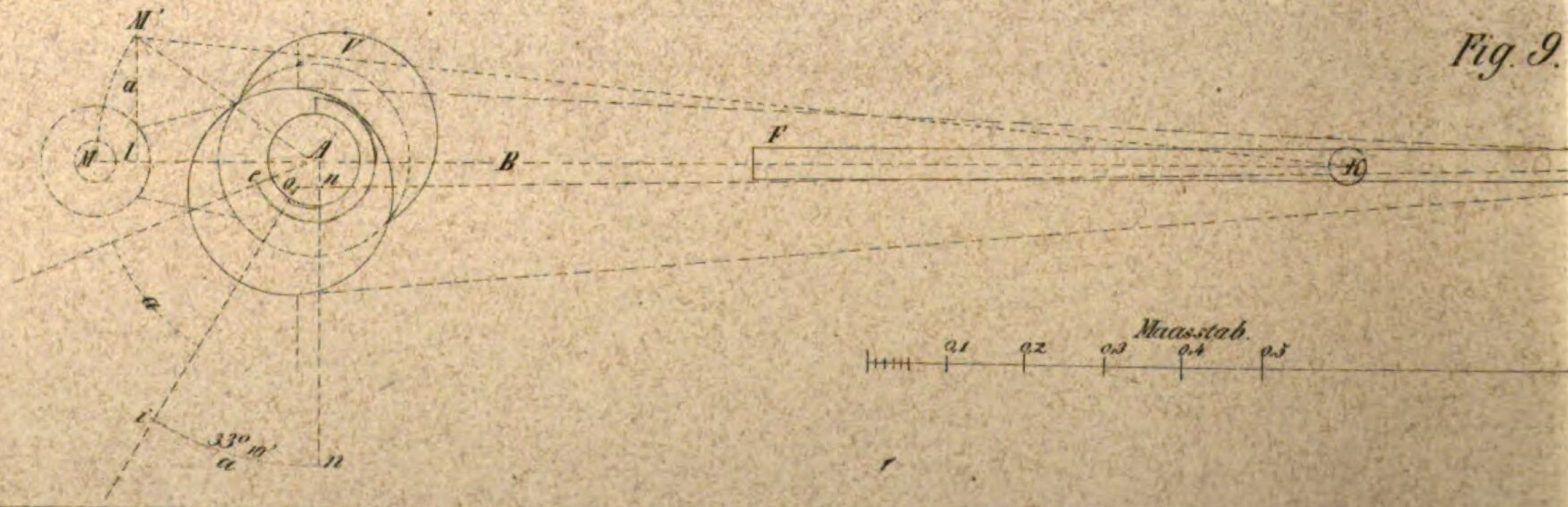
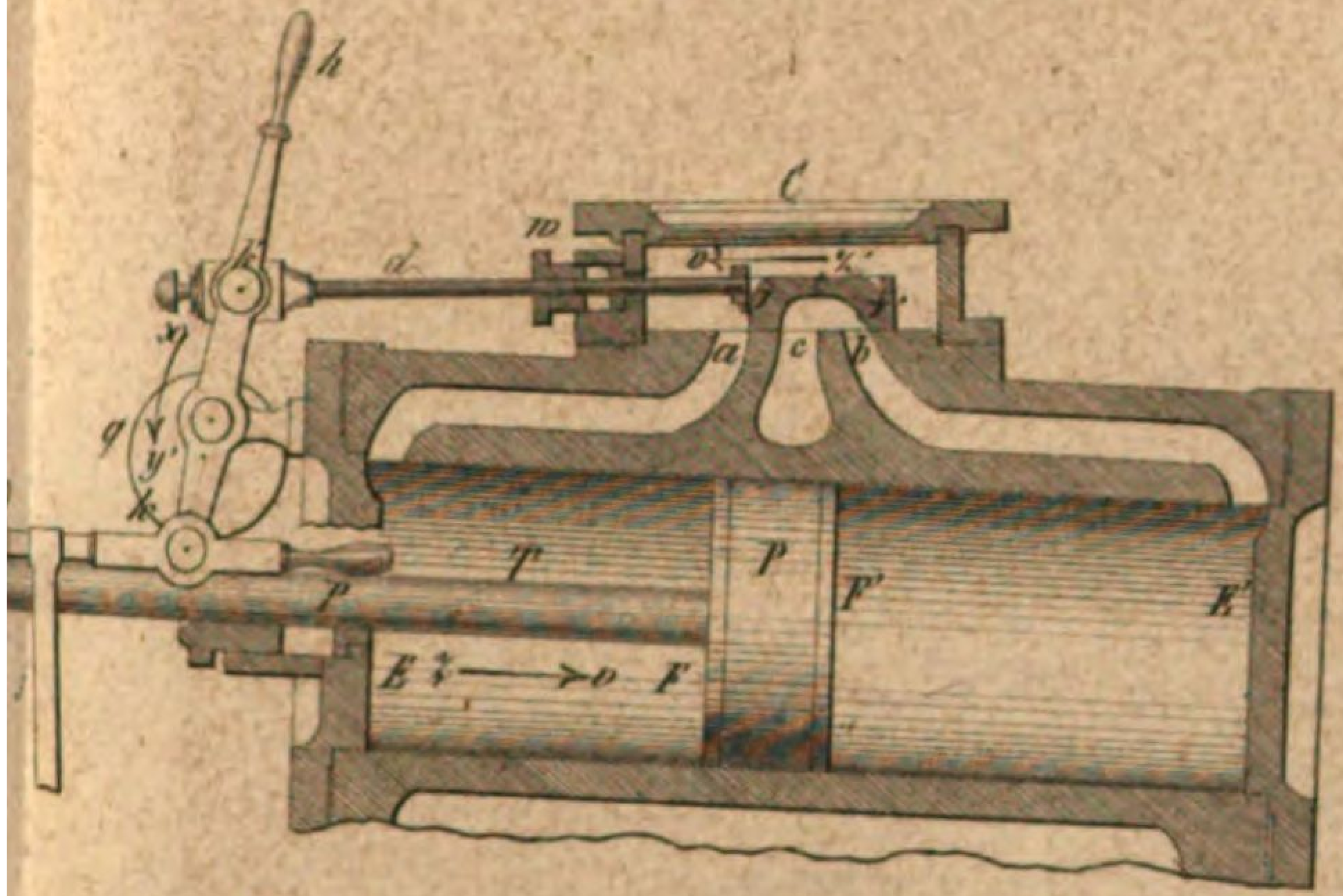
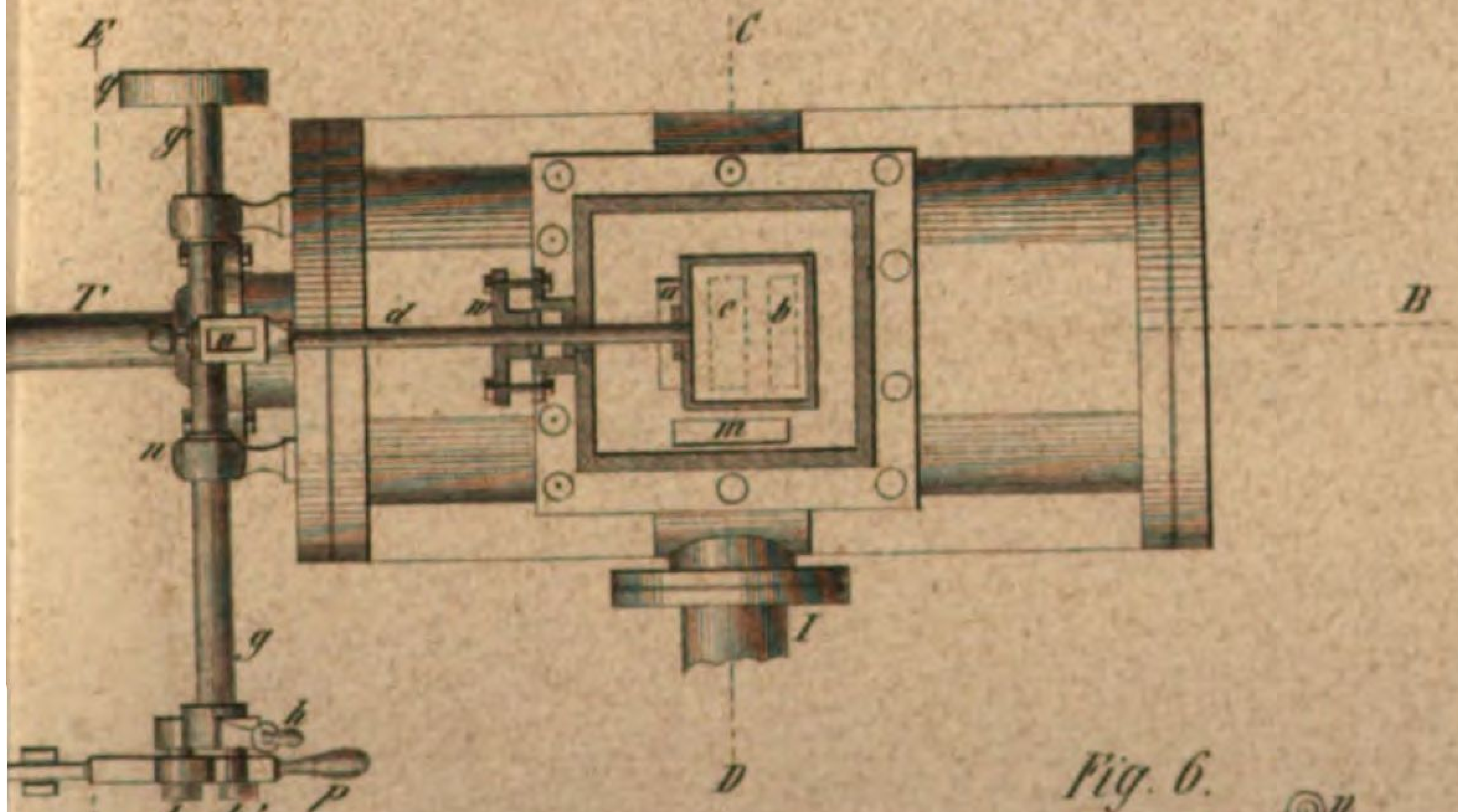


Fig. 9.







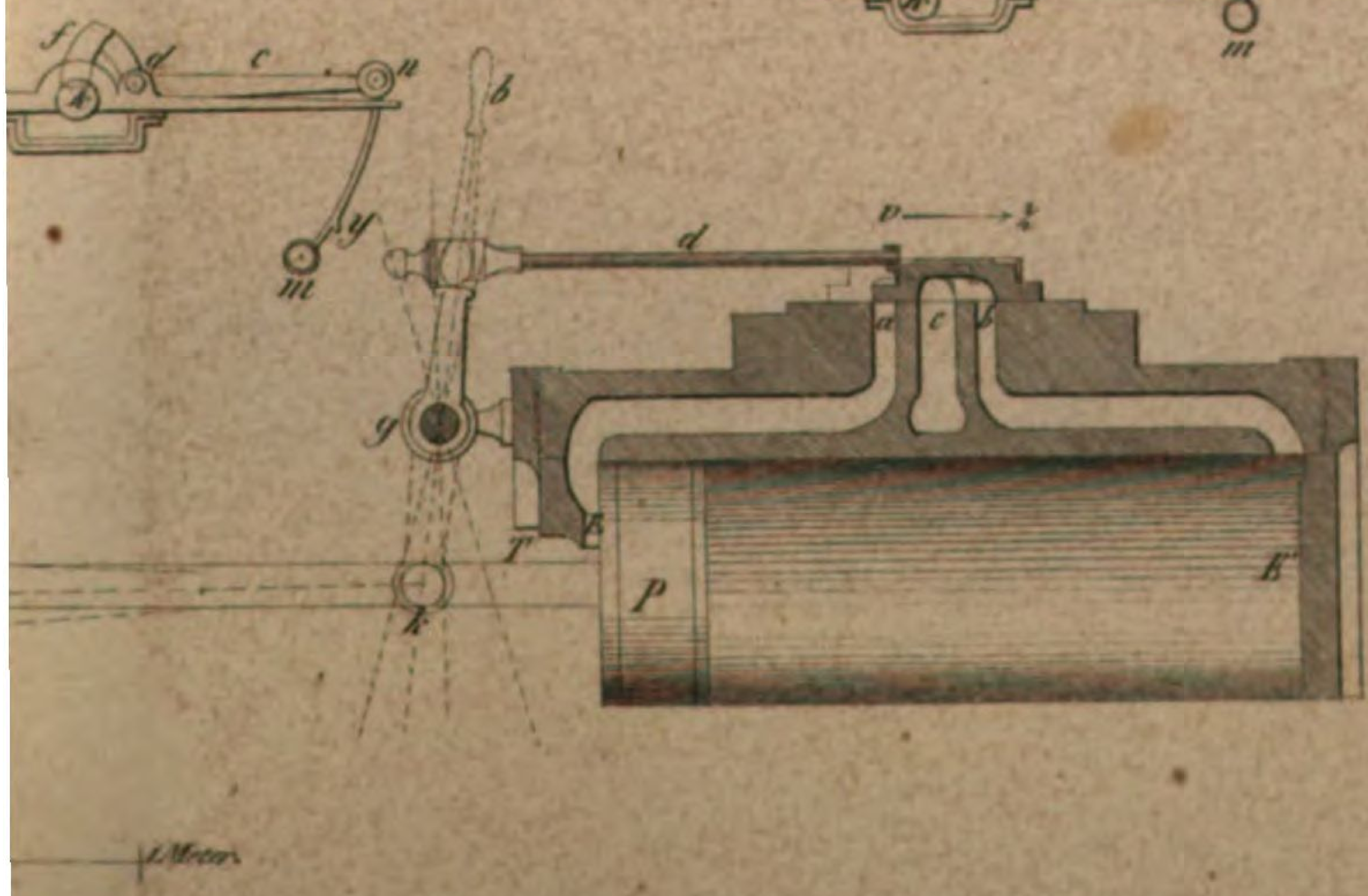


Fig. 3.
Senkrechter Durchschnitt.
nach C. D. der Fig. 2.

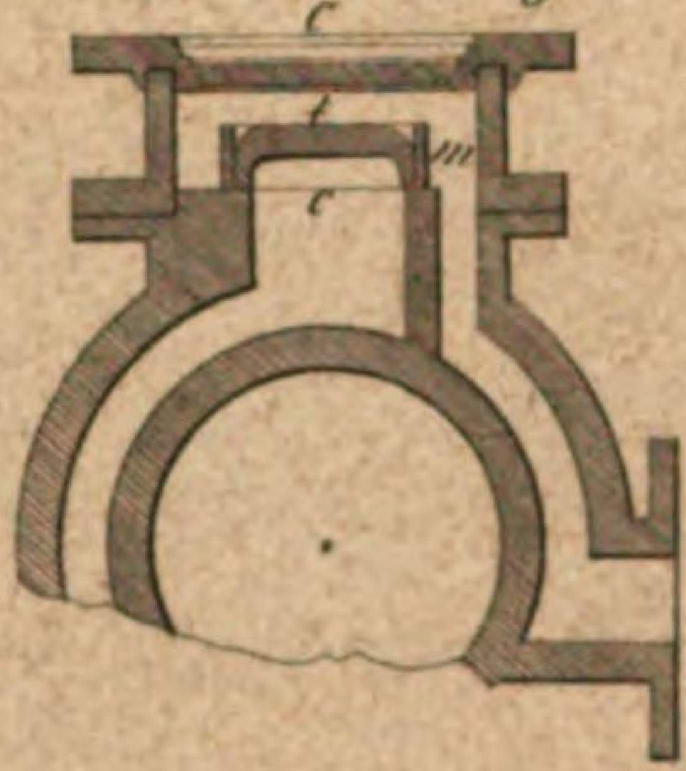


Fig. 4.
Senkrechter Aufriss.
nach E. F. der Fig. 2.

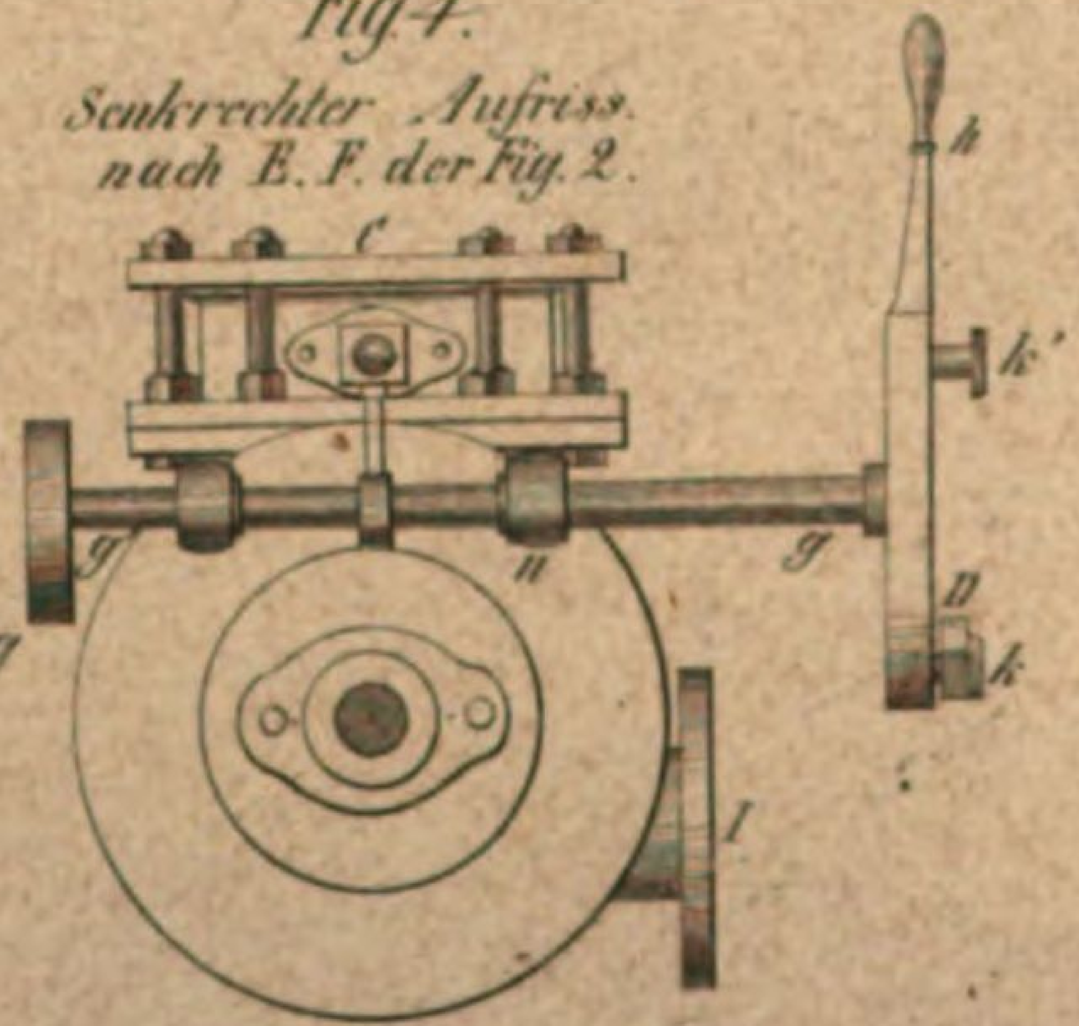


Fig. 6.

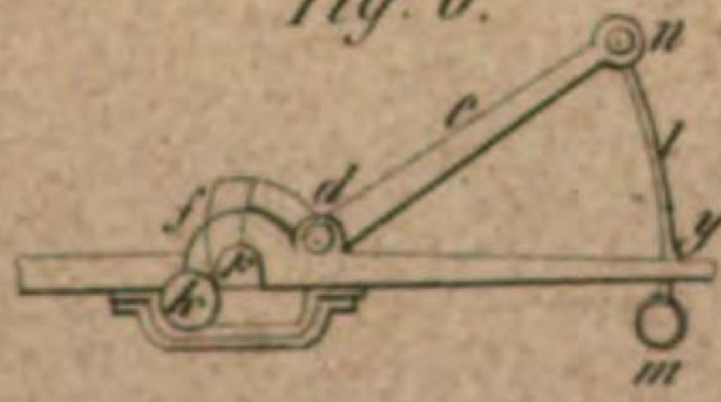


Fig. 7.

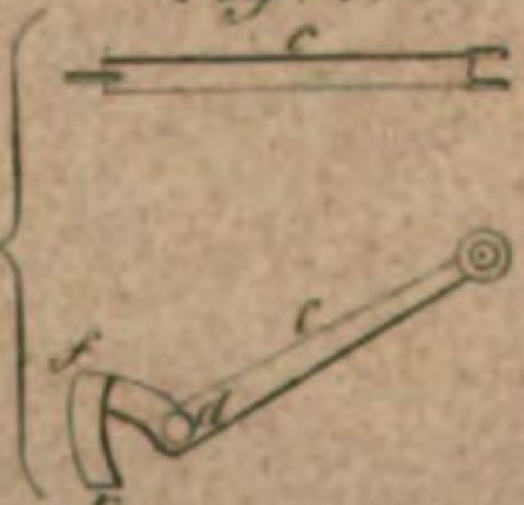
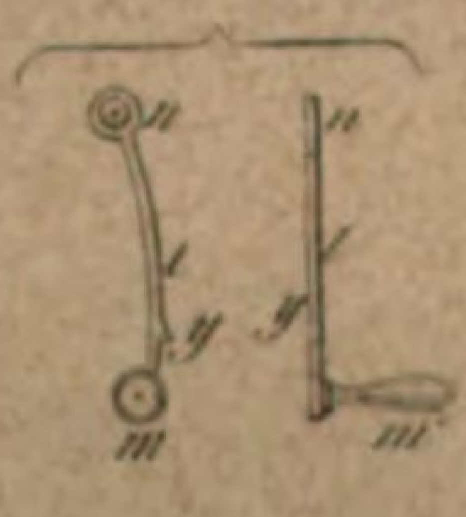
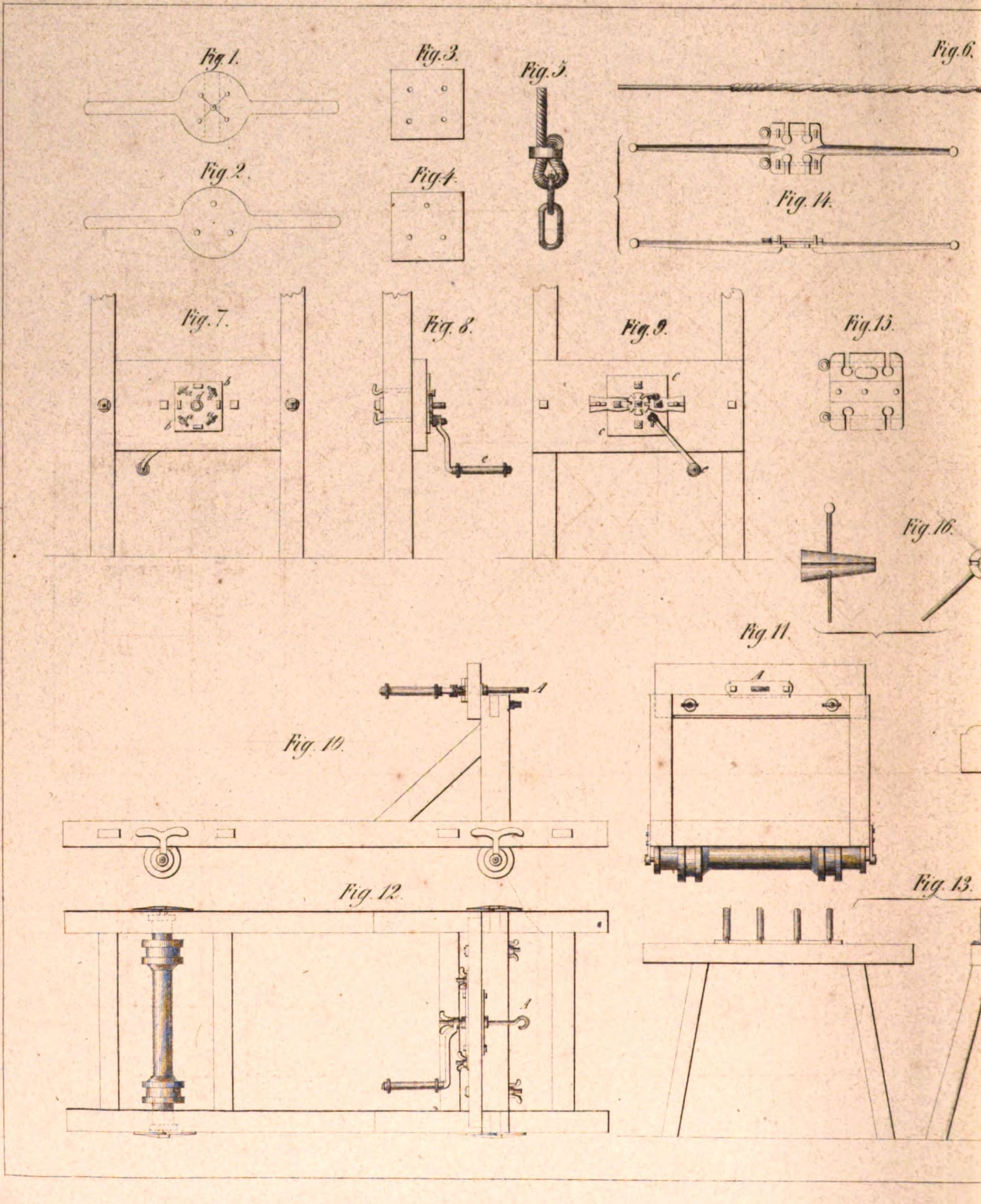
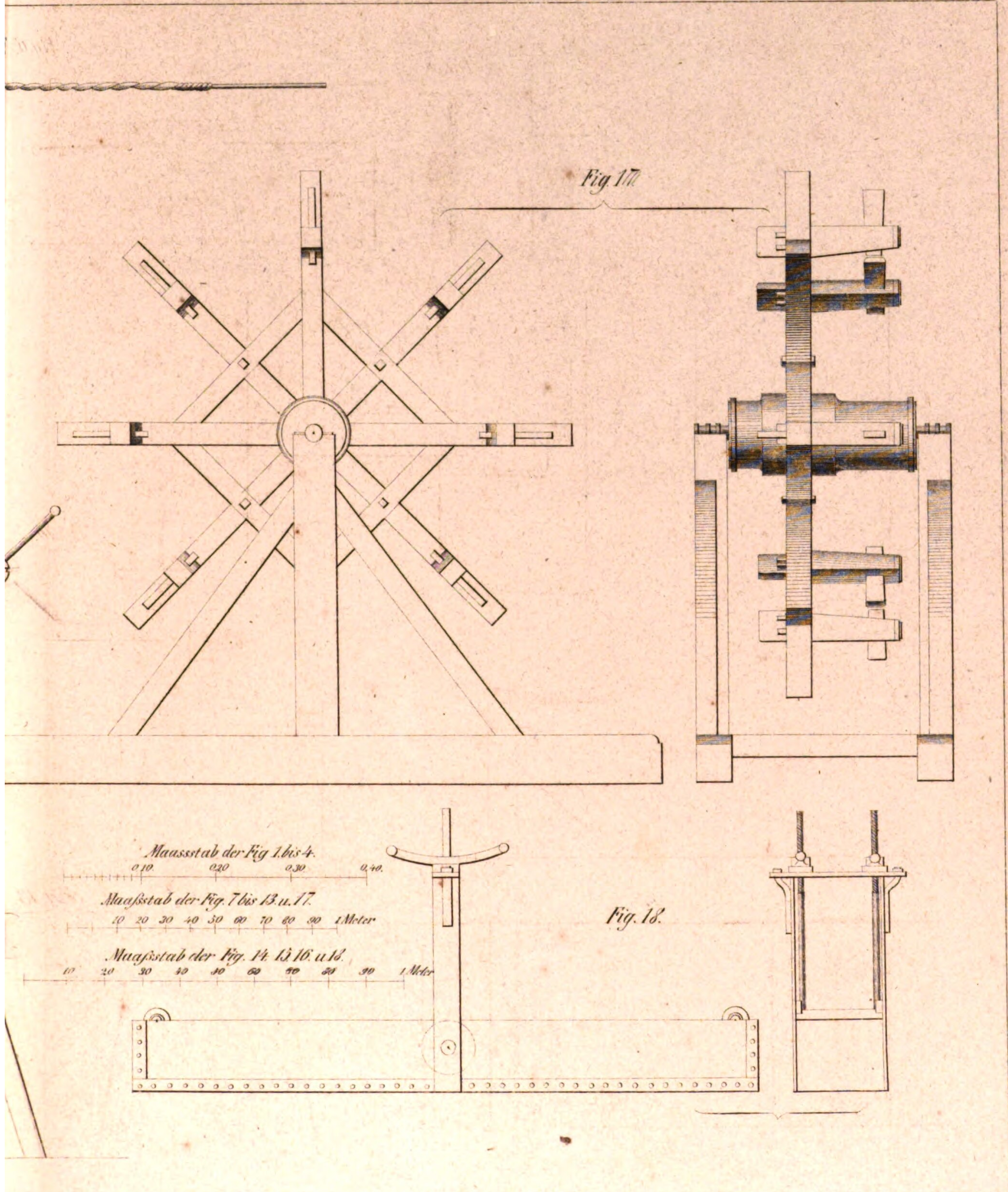
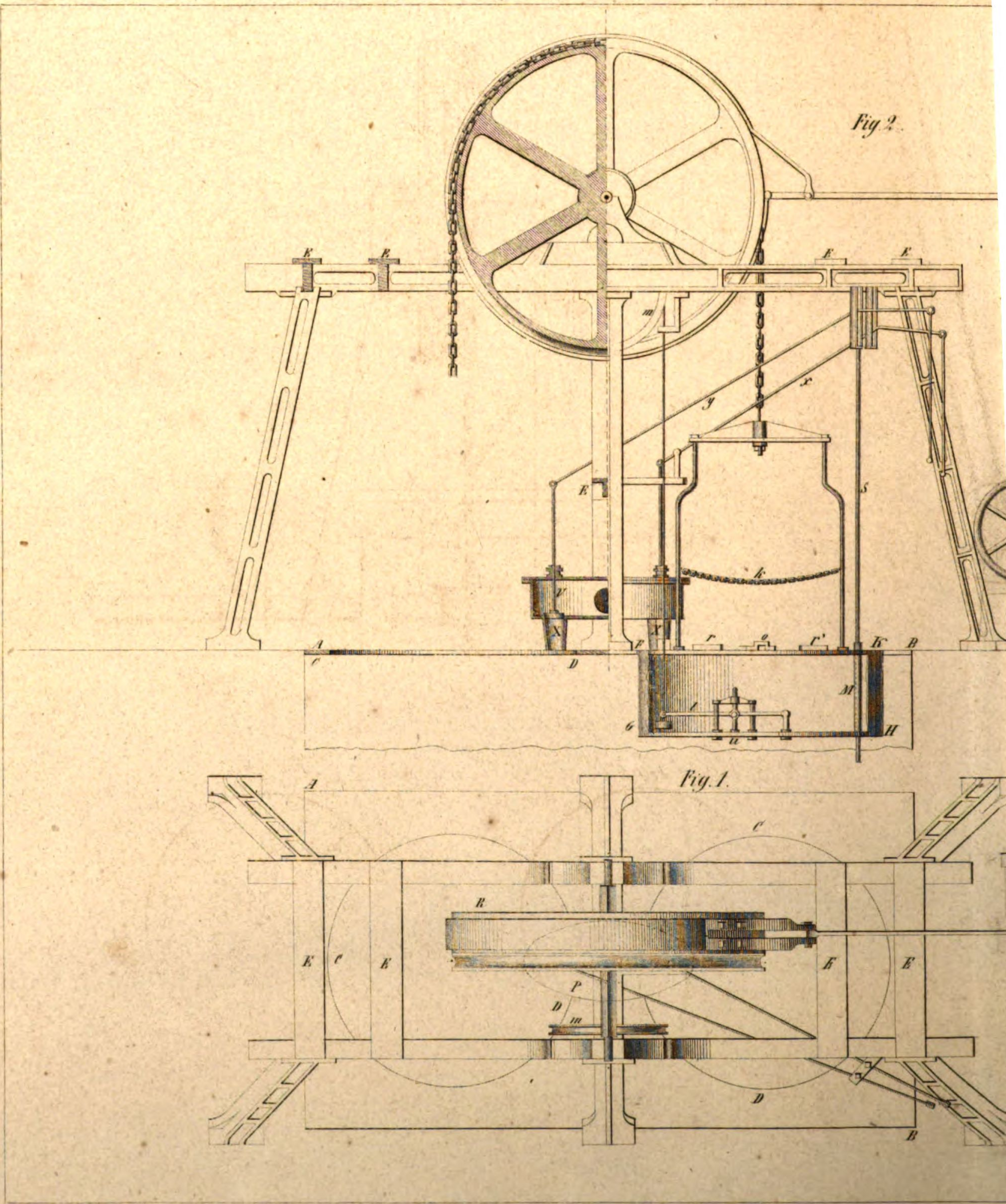


Fig. 8.




Fig. 1.
Fig. 2.
Fig. 3.
Fig. 4.
Fig. 5.
Fig. 6.
Fig. 14.
Fig. 7.
Fig. 8.
Fig. 9.
Fig. 15.
Fig. 16.
Fig. 11.
Fig. 10.
Fig. 12.
Fig. 13.


Fig. 17.
Maassstab der Fig. 1 bis 4.
0,10 0,20 0,30 0,40.
Maaßstab der Fig. 7 bis 13. u. 17.
10 20 30 40 50 60 70 80 90 1 Meter
Maaßstab der Fig. 14. 15. 16. u 18.
1 Meter
Fig. 18.


Fig. 2.
Fig. 1.

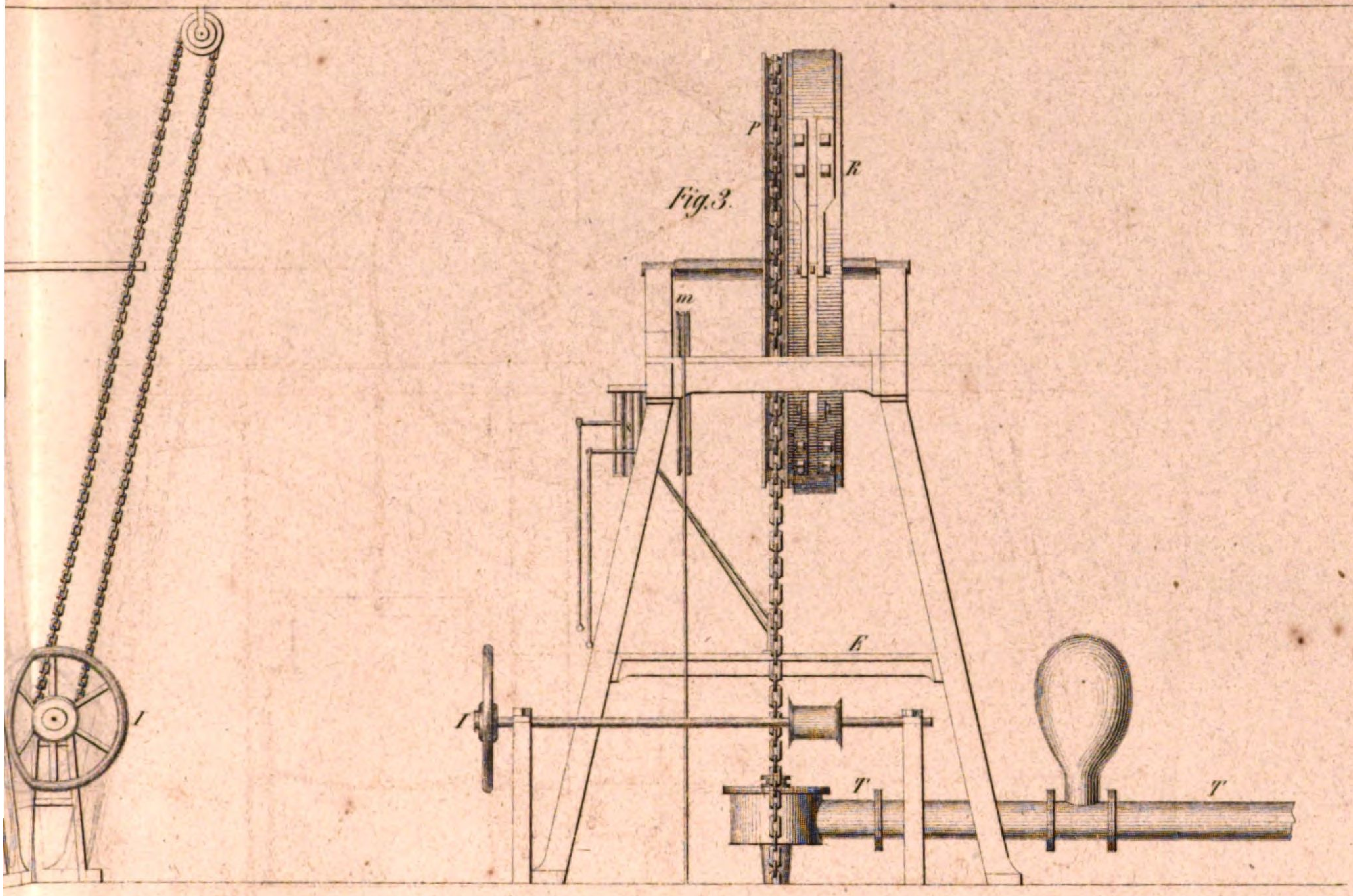


Fig. 3.

Fig. 4

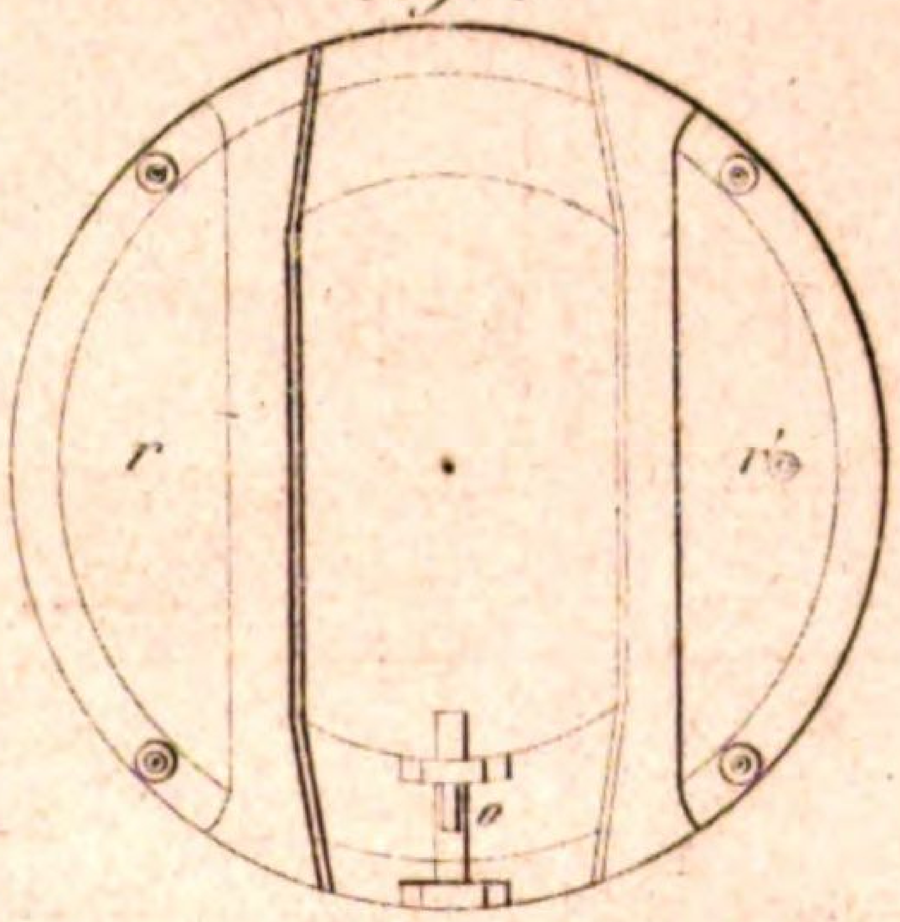
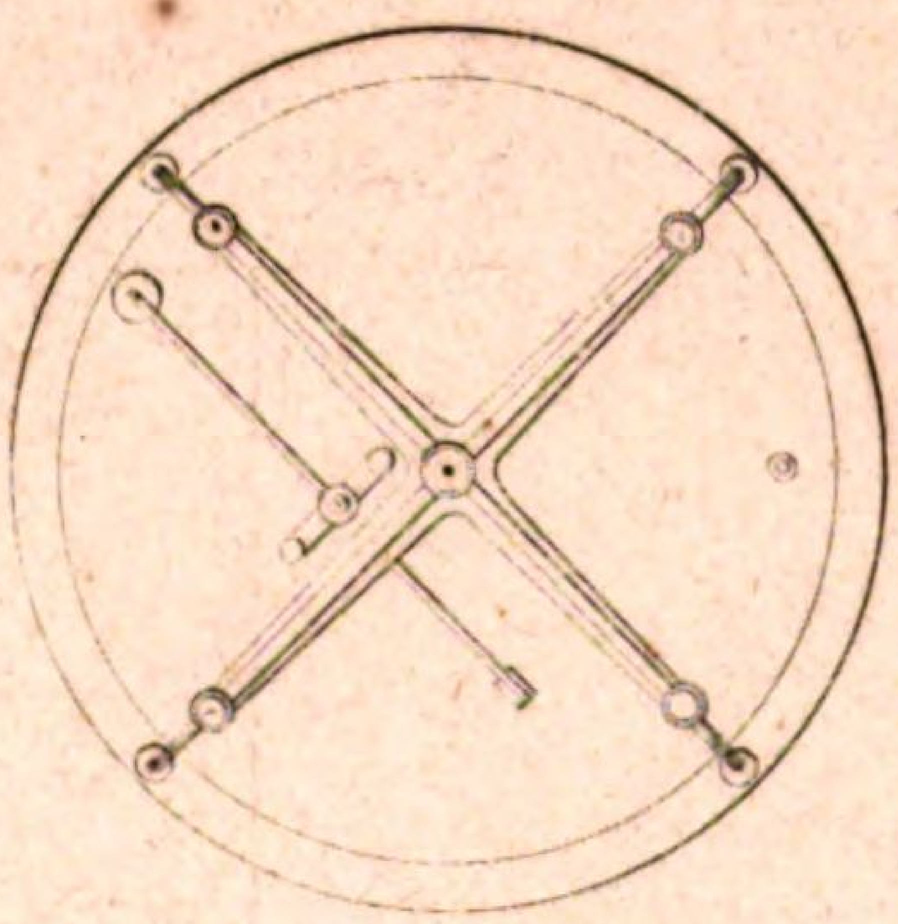
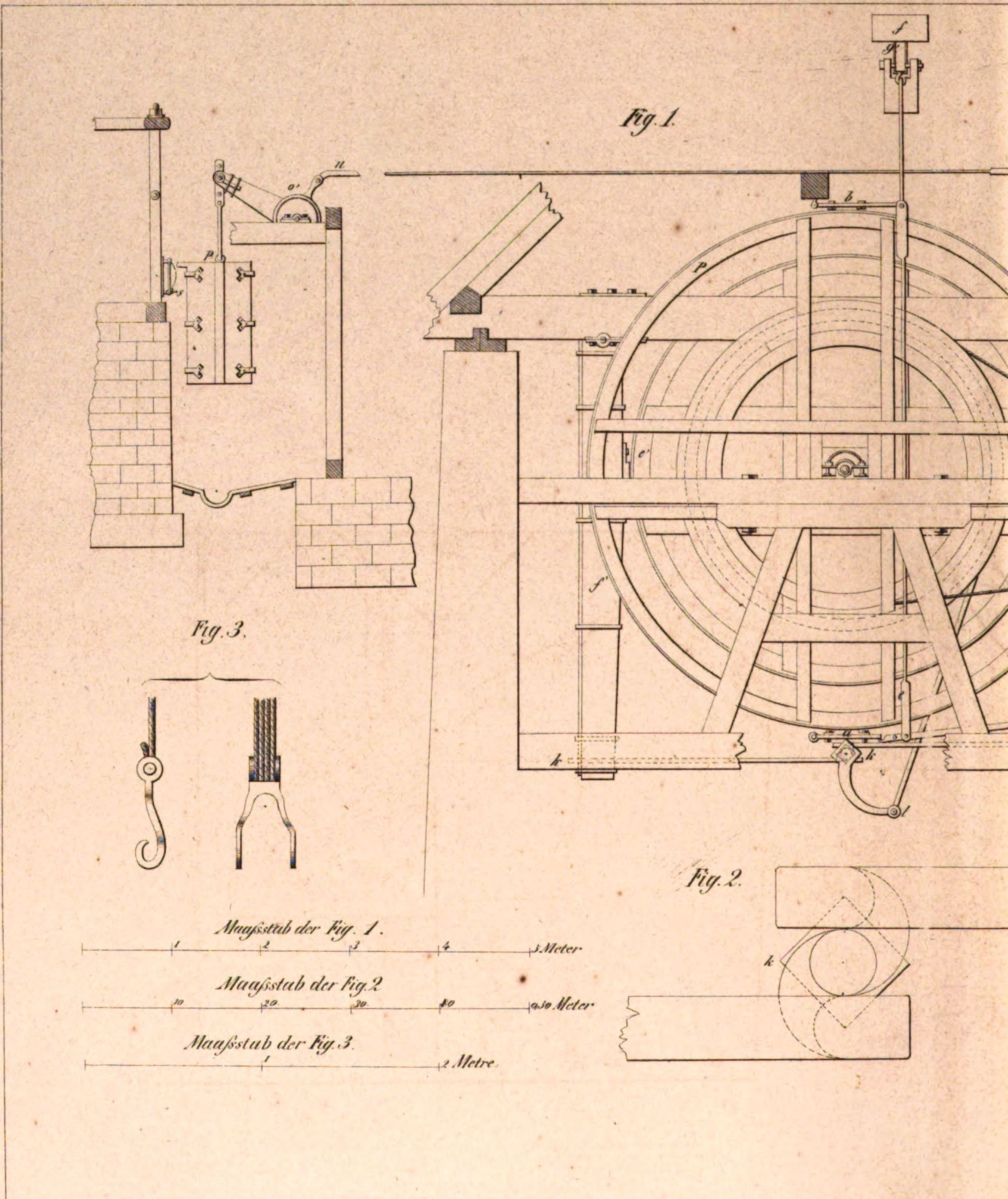


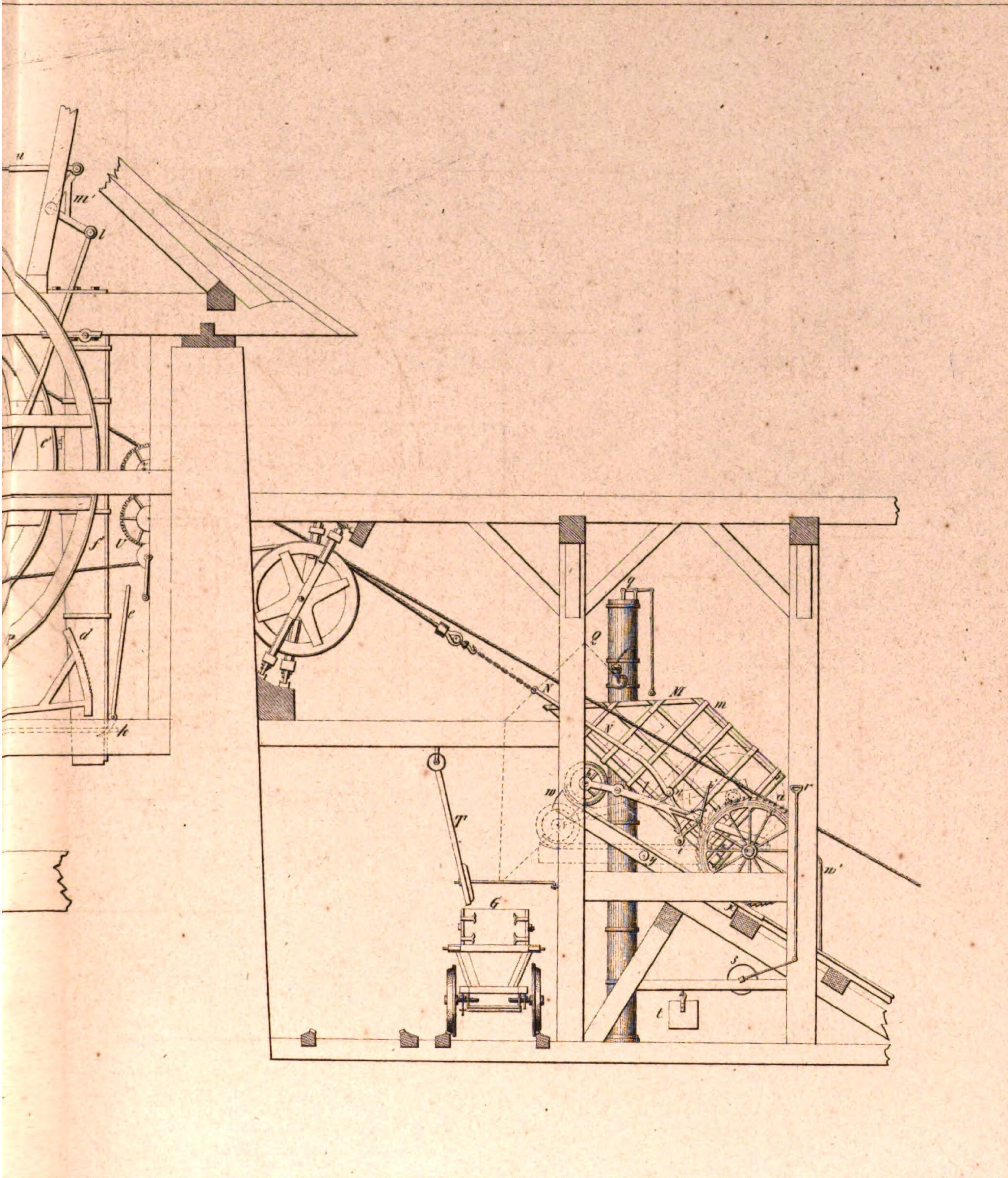
Fig. 5.



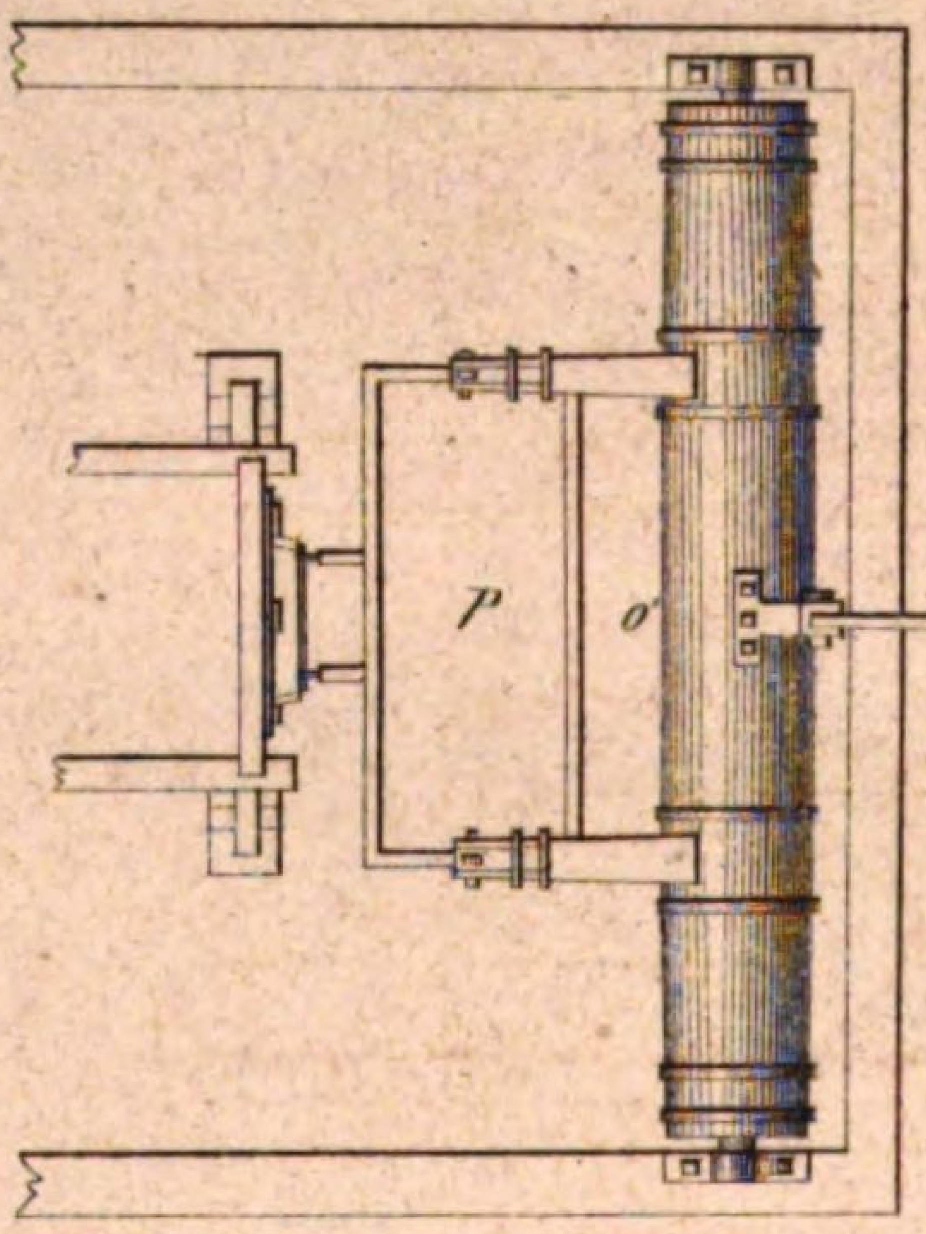


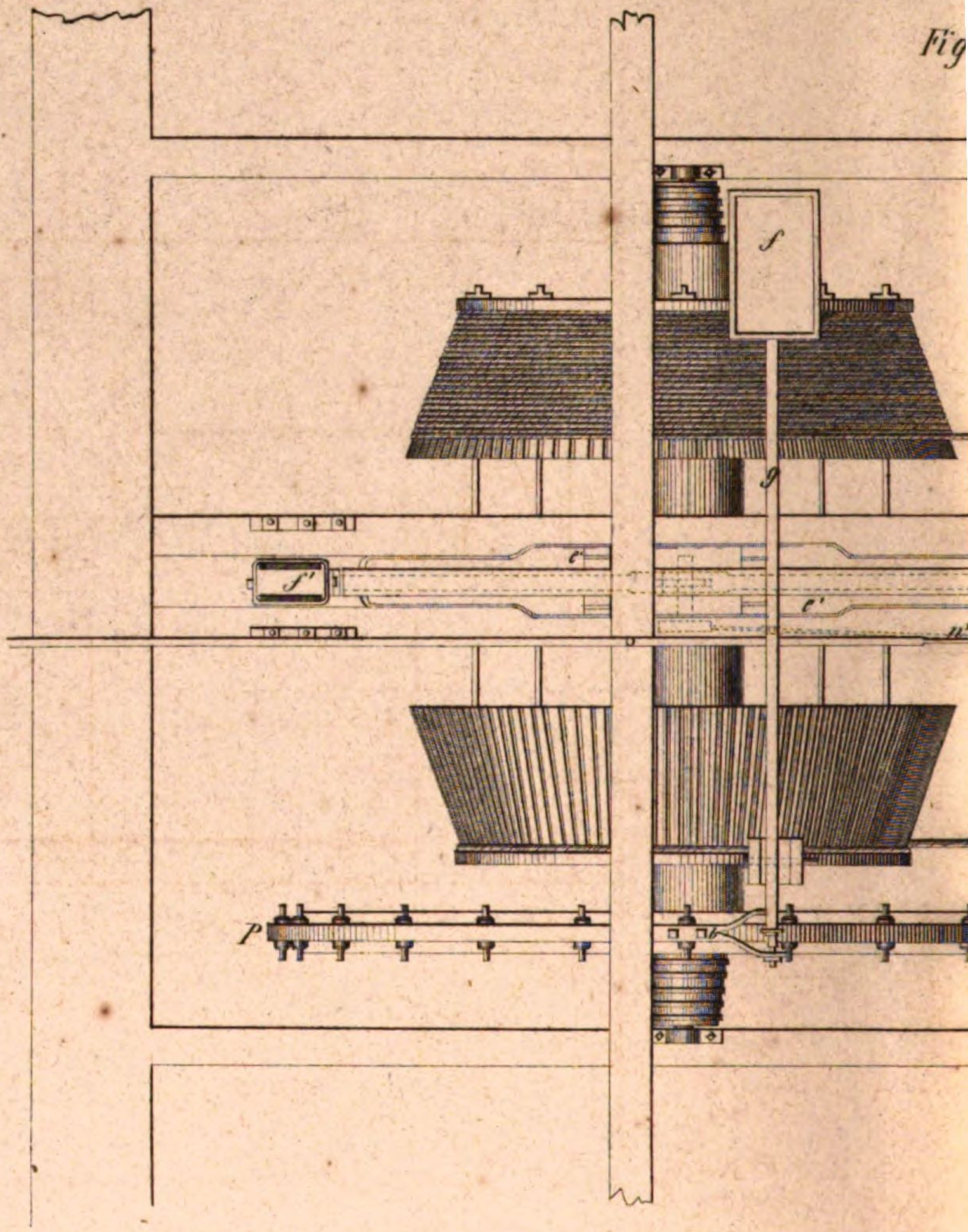
Rampe mit W


Fig. 1.
Fig. 2.
Fig. 3.
Maaßstab der Fig. 1.
1 2 3 4 5 Meter
Maaßstab der Fig. 2
10 20 30 40 0,50 Meter
Maaßstab der Fig. 3.
1 2 Metre


u
m'
l
c'
f'
V
e
d
h
Q
q
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M
m
N
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T
G
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Rampe mit





Maaßstab der Fig. 1.

1 2 3 4 5 Meter.

Maaßstab der Fig. 2.

1 2 Meter.

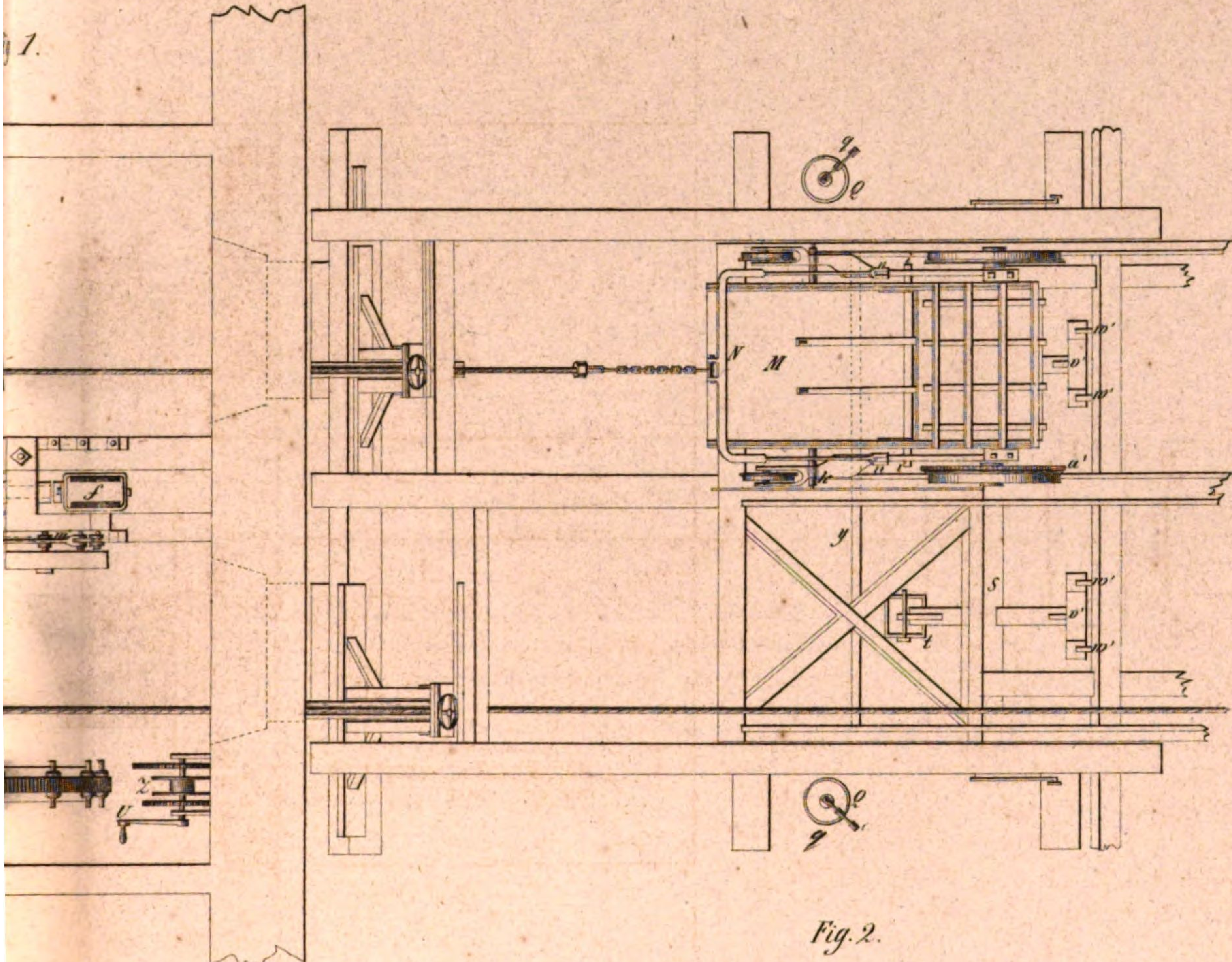
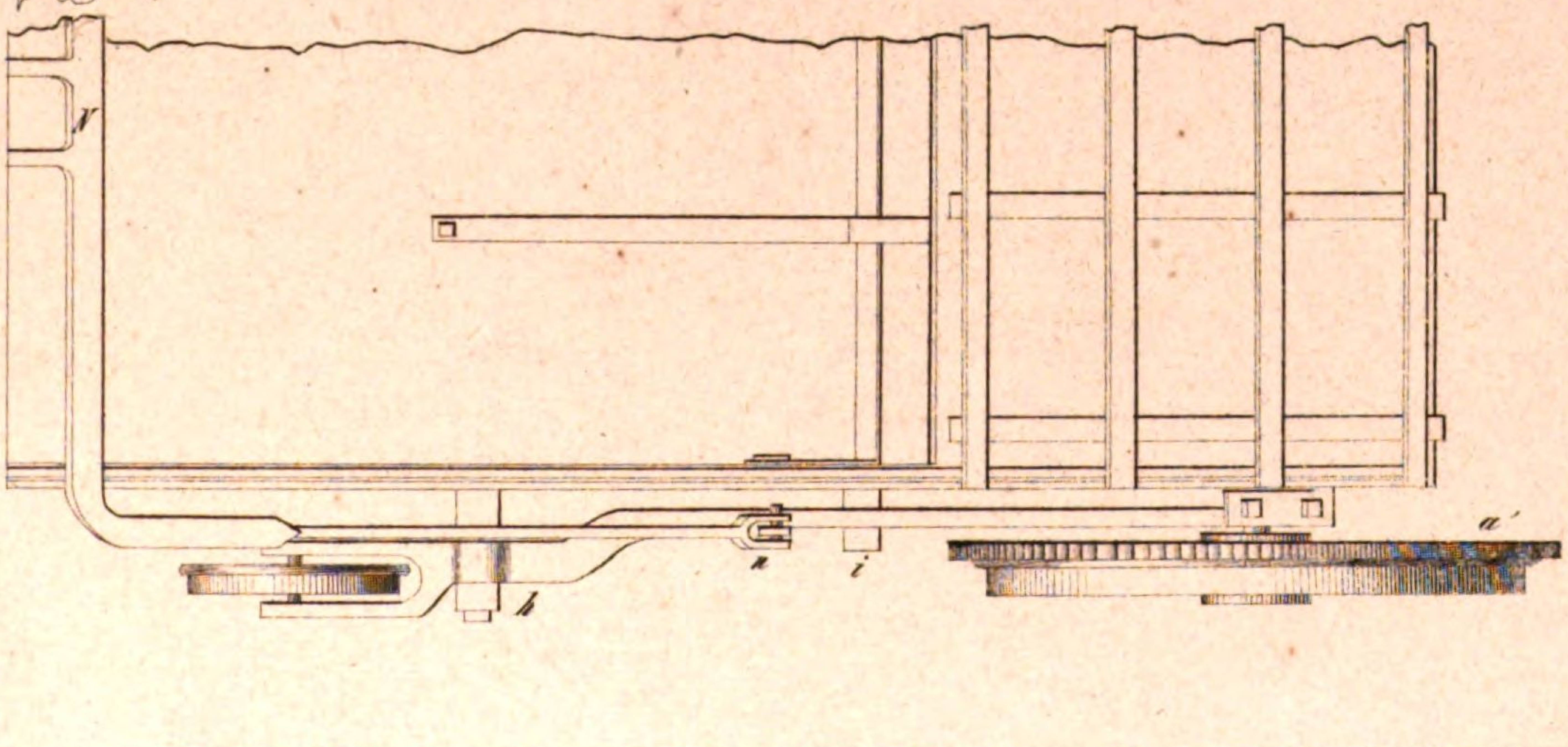


Fig. 2.



Rampe mit W

Fig. 1.

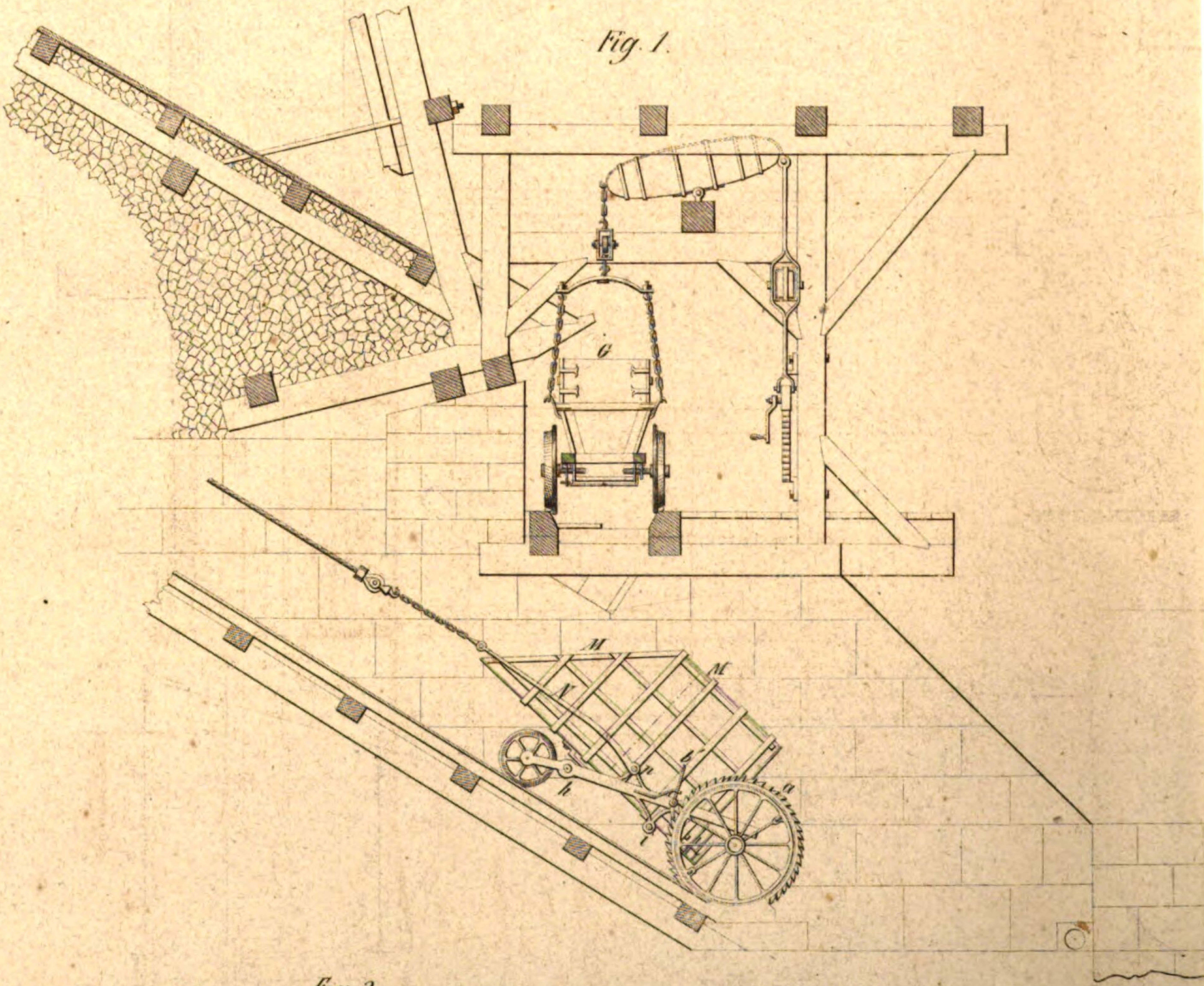
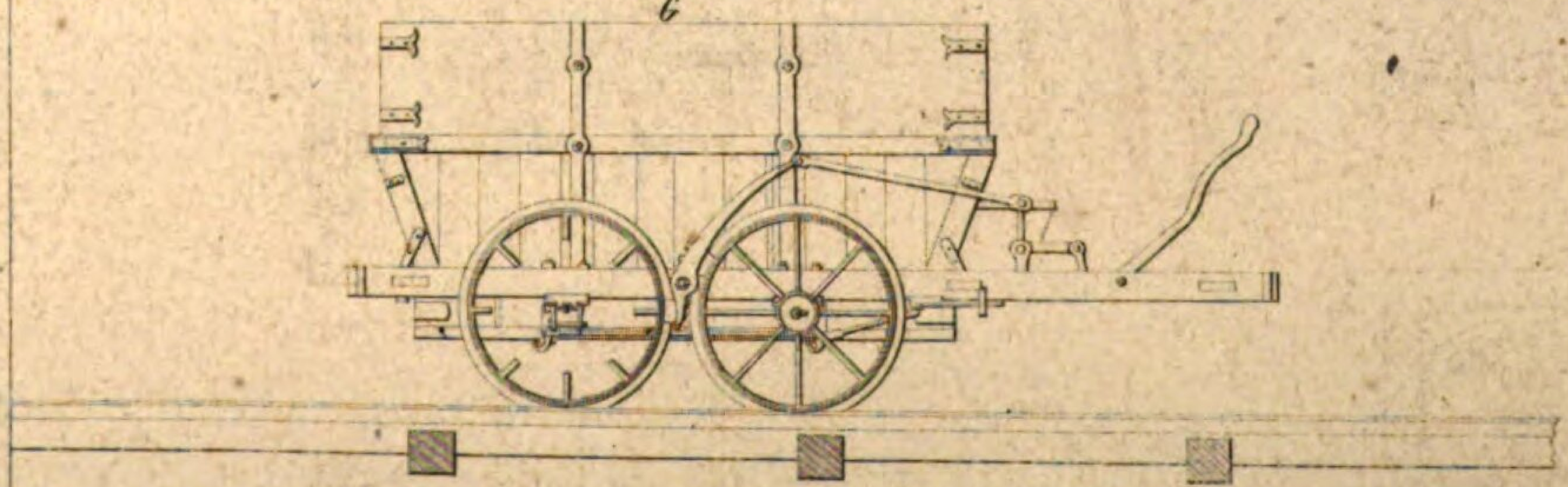


Fig. 3.



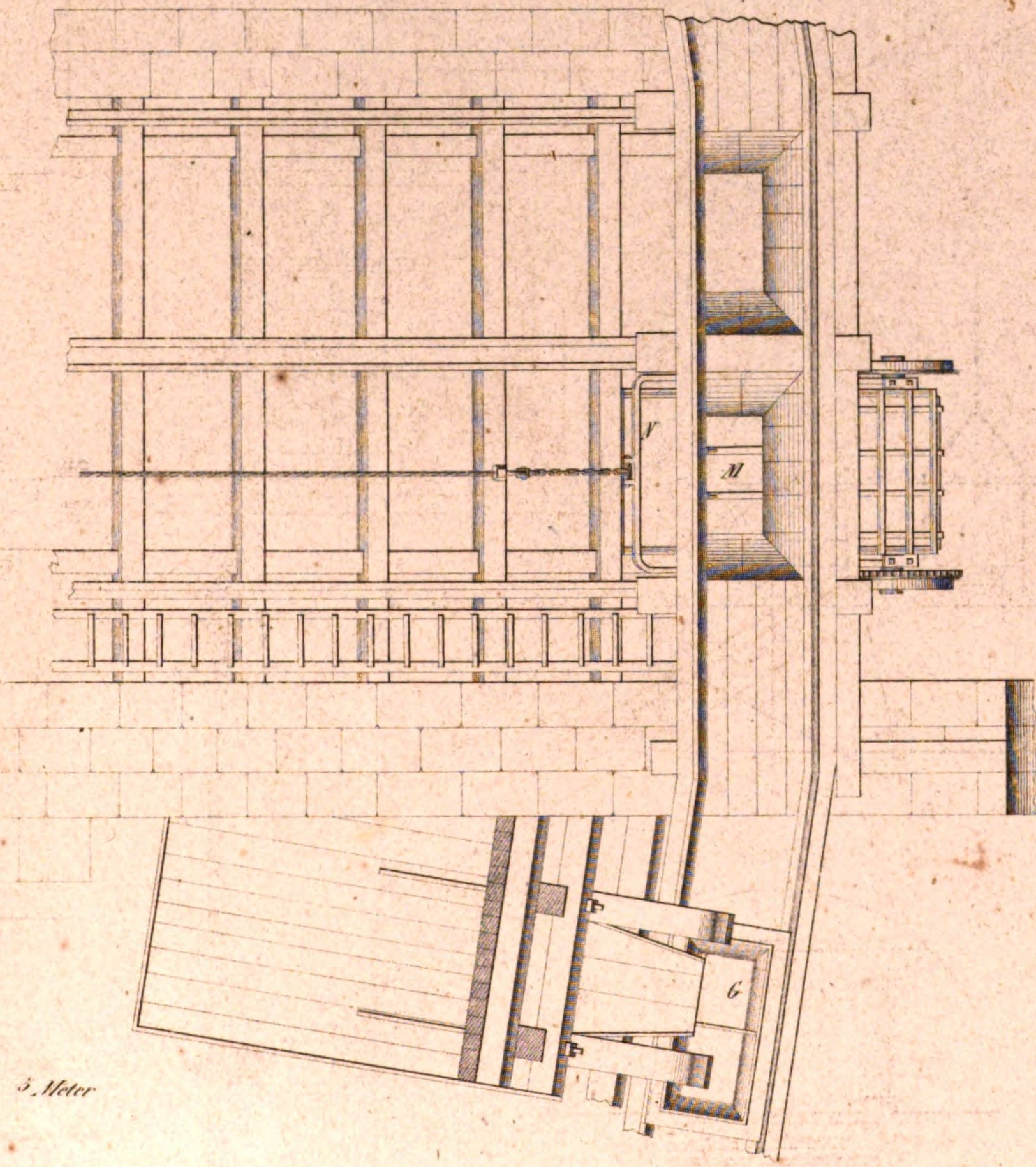
Maaßstab der Fig.

1 2 3

Maaßstab der Fig. 3.

1 2

Fig. 2.



Einzelne Theile de

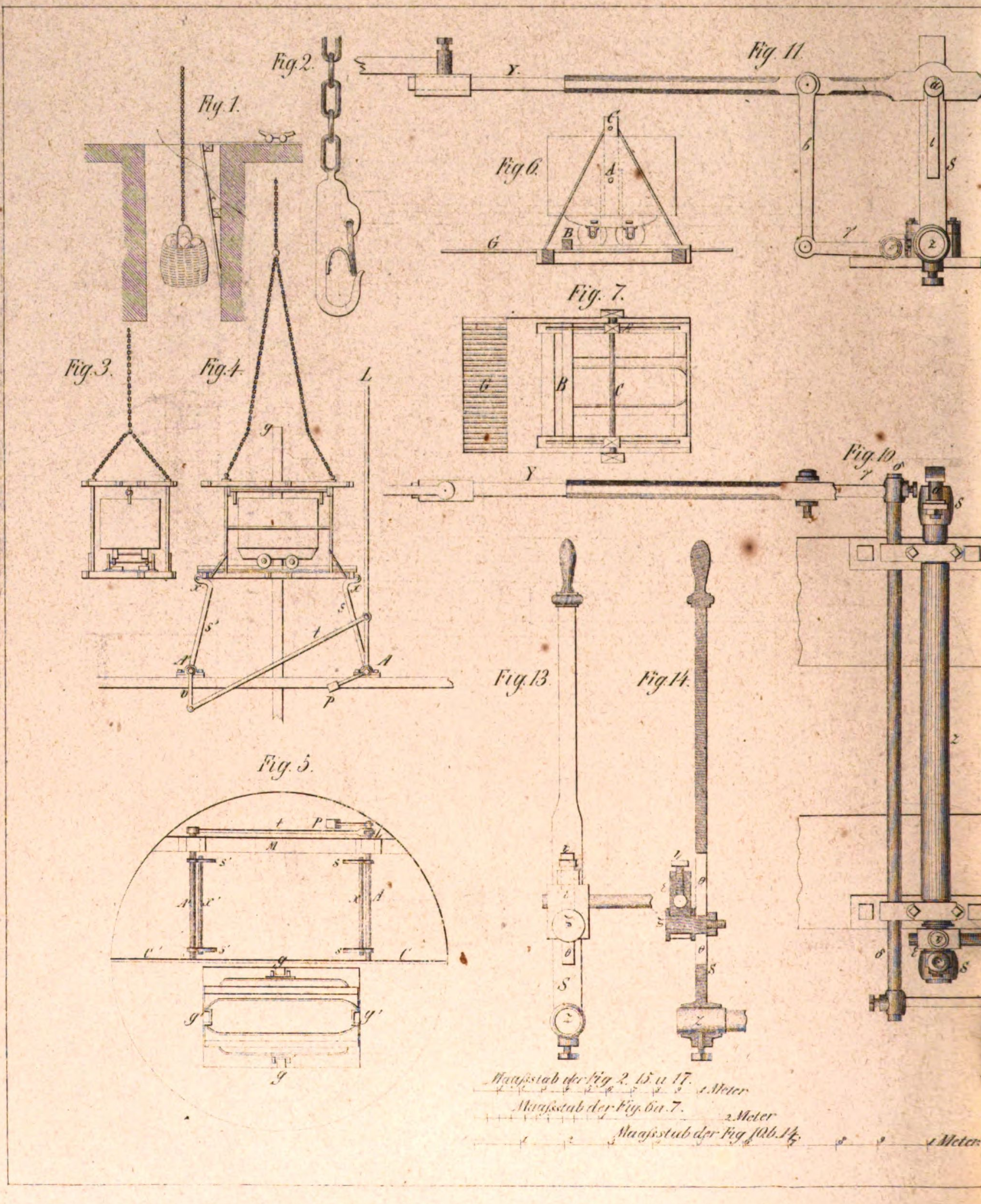




Fig. 12.



Fig. 15.

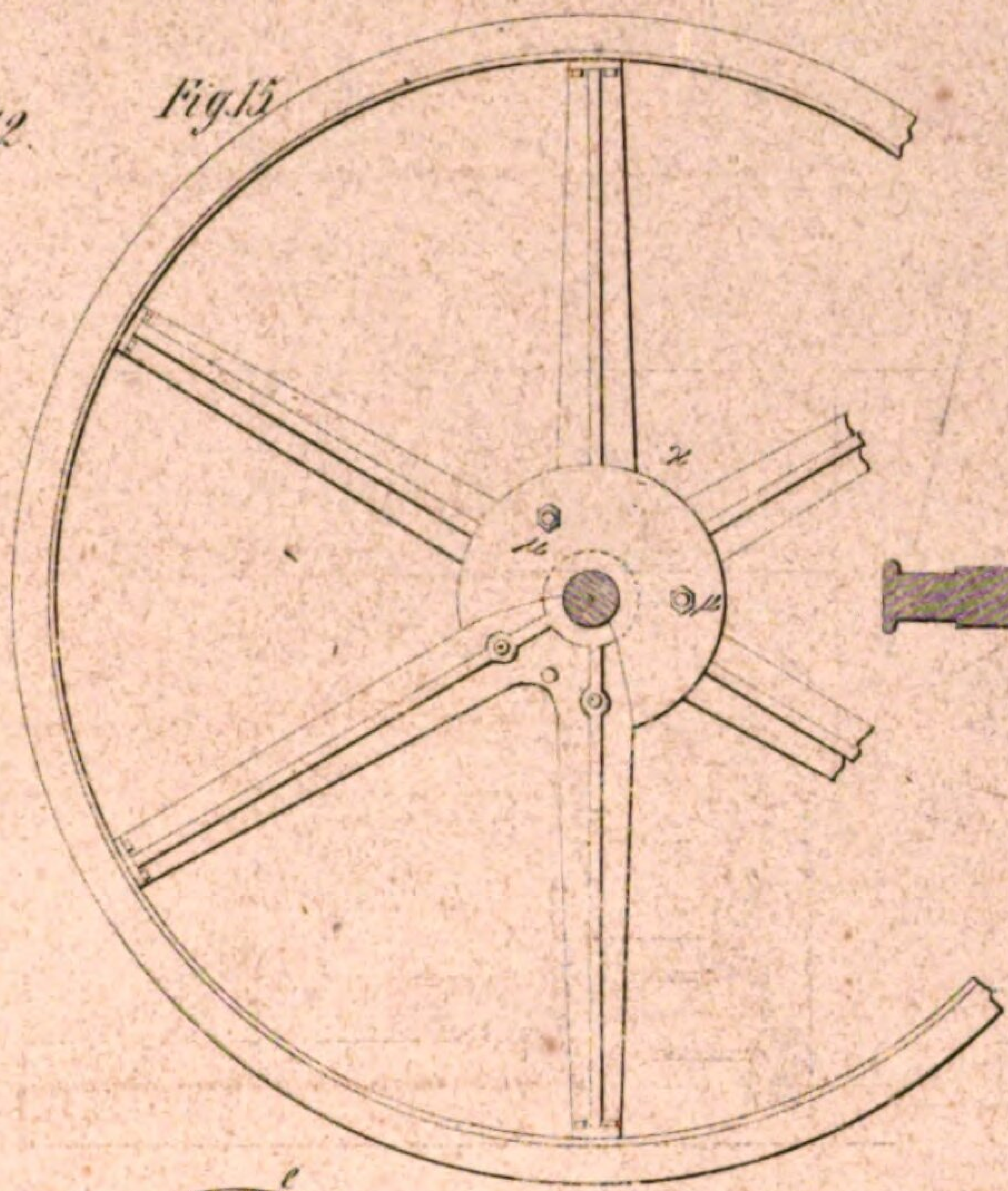


Fig. 16.

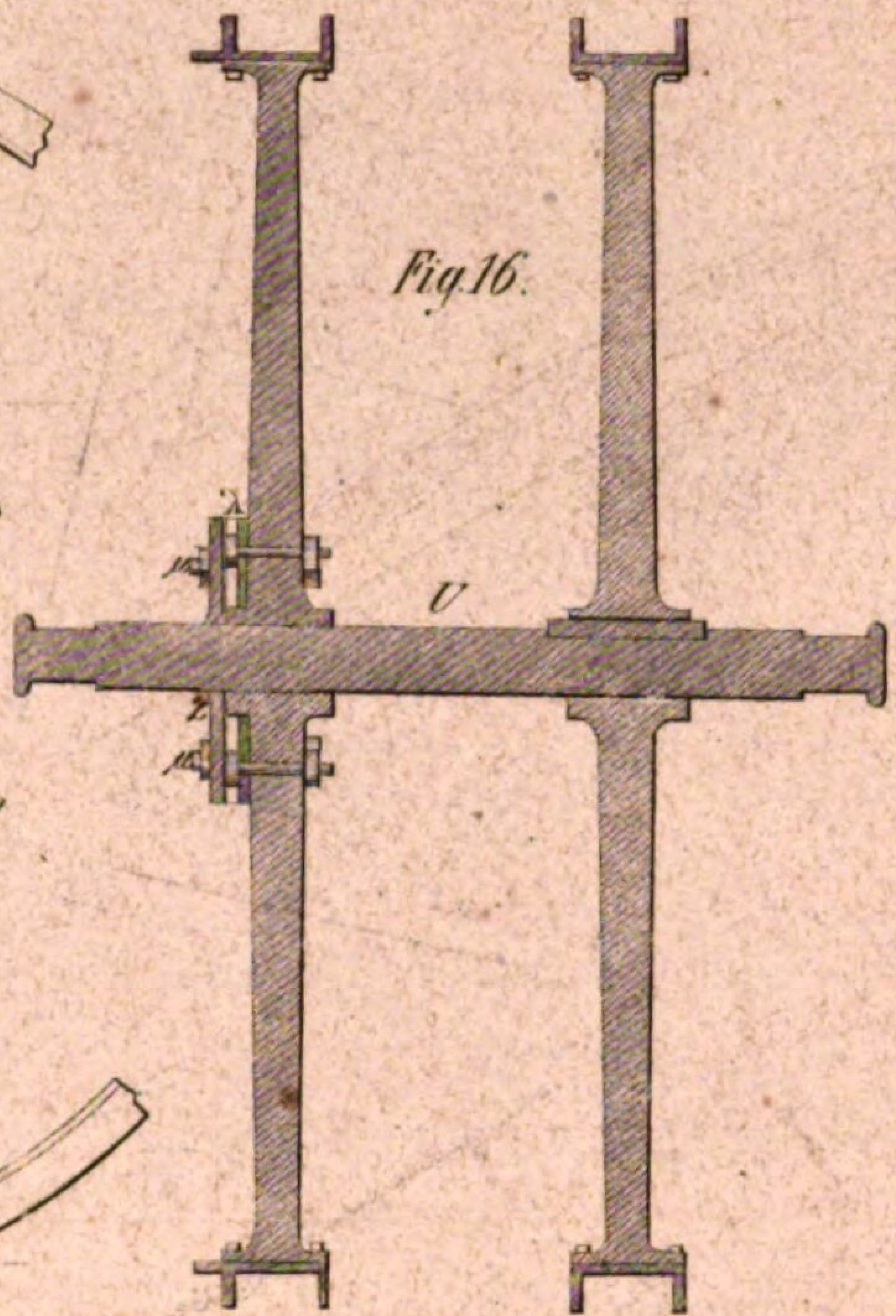


Fig. 17.



Fig. 8.

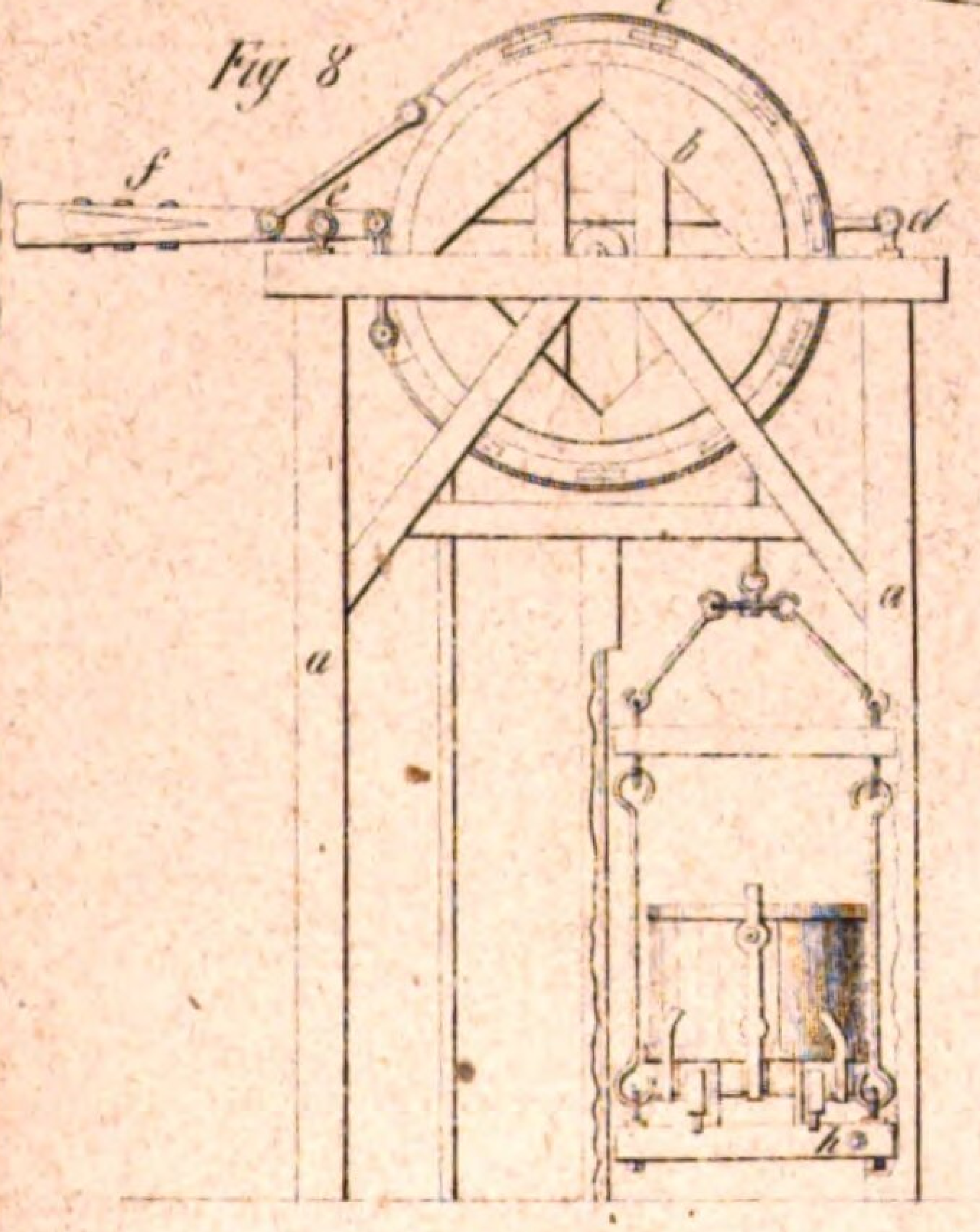


Fig. 19.

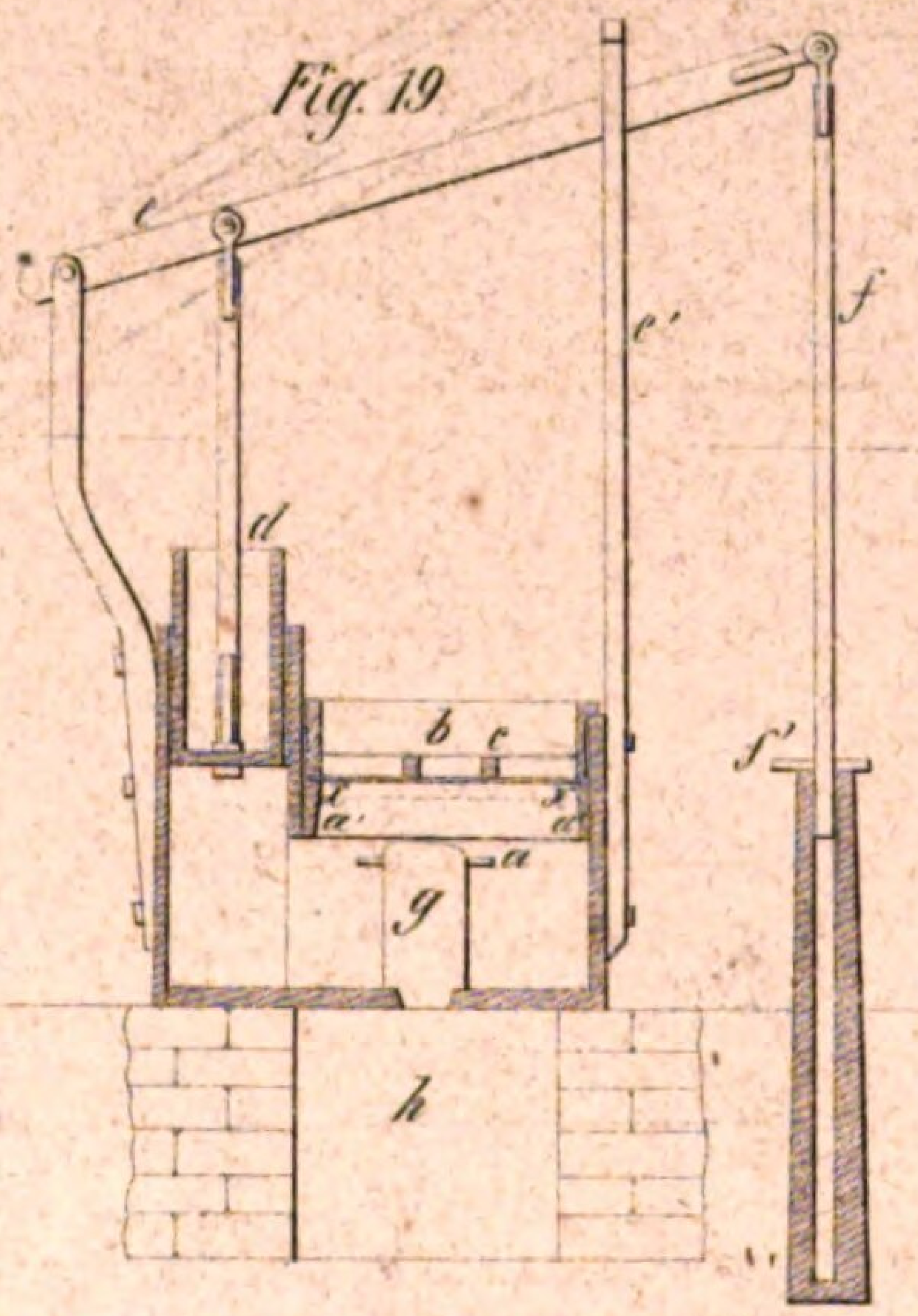


Fig. 9.

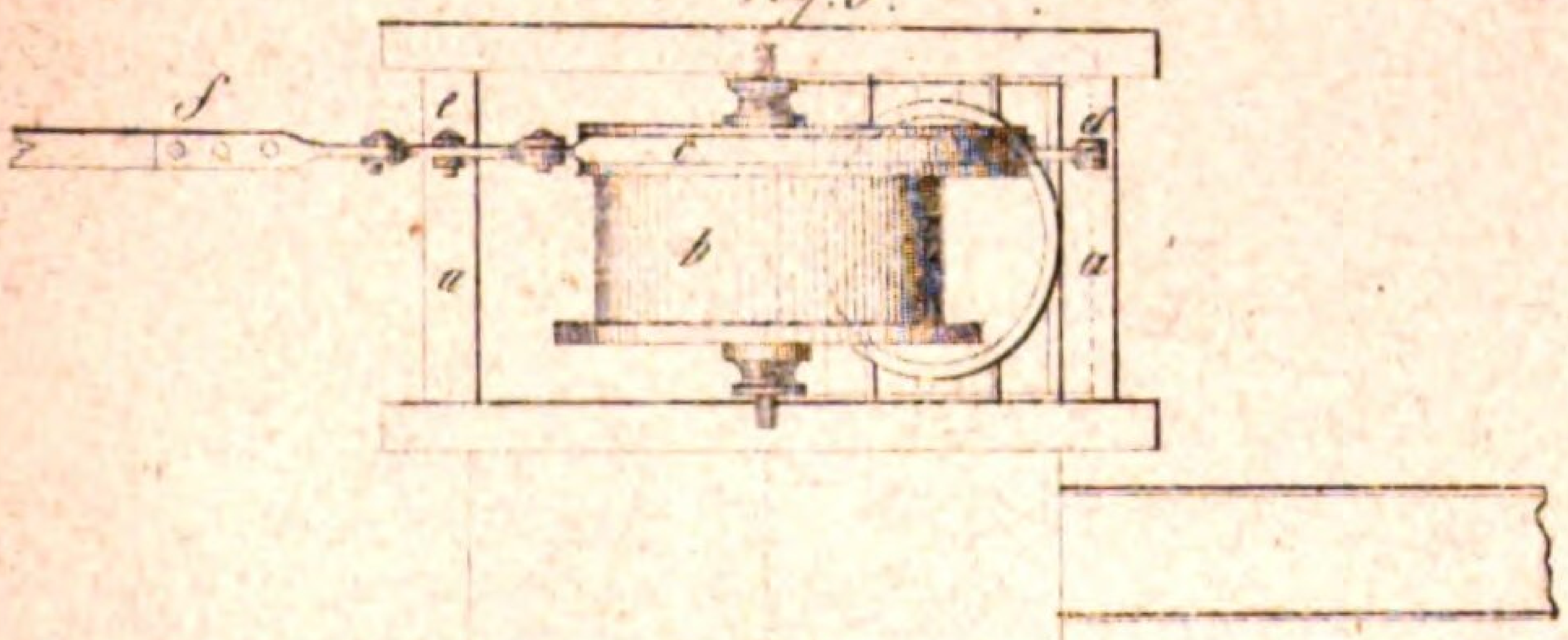
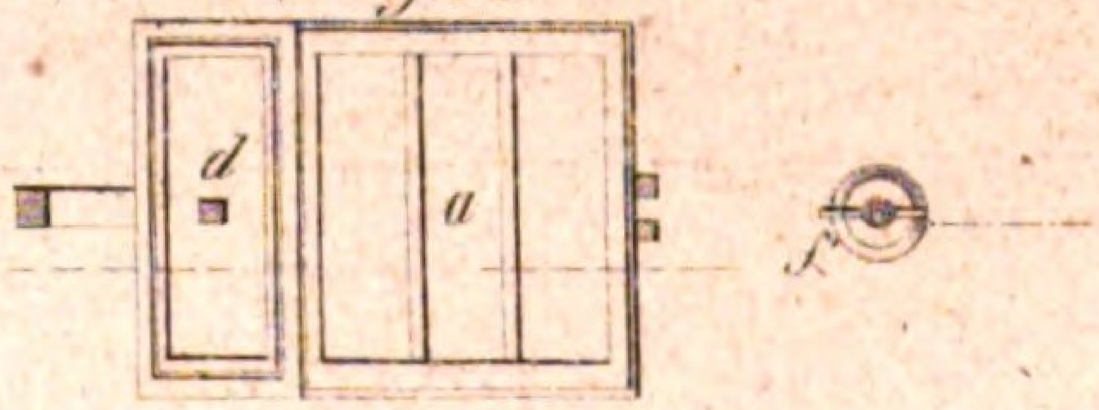


Fig. 18.



Maaßstab der Fig. 1 3 bis 5. 8. 9. 18 u 19. 1 Meter.

Förderungs =Maschine in

Aufriss nach A B.

Fig. 2.

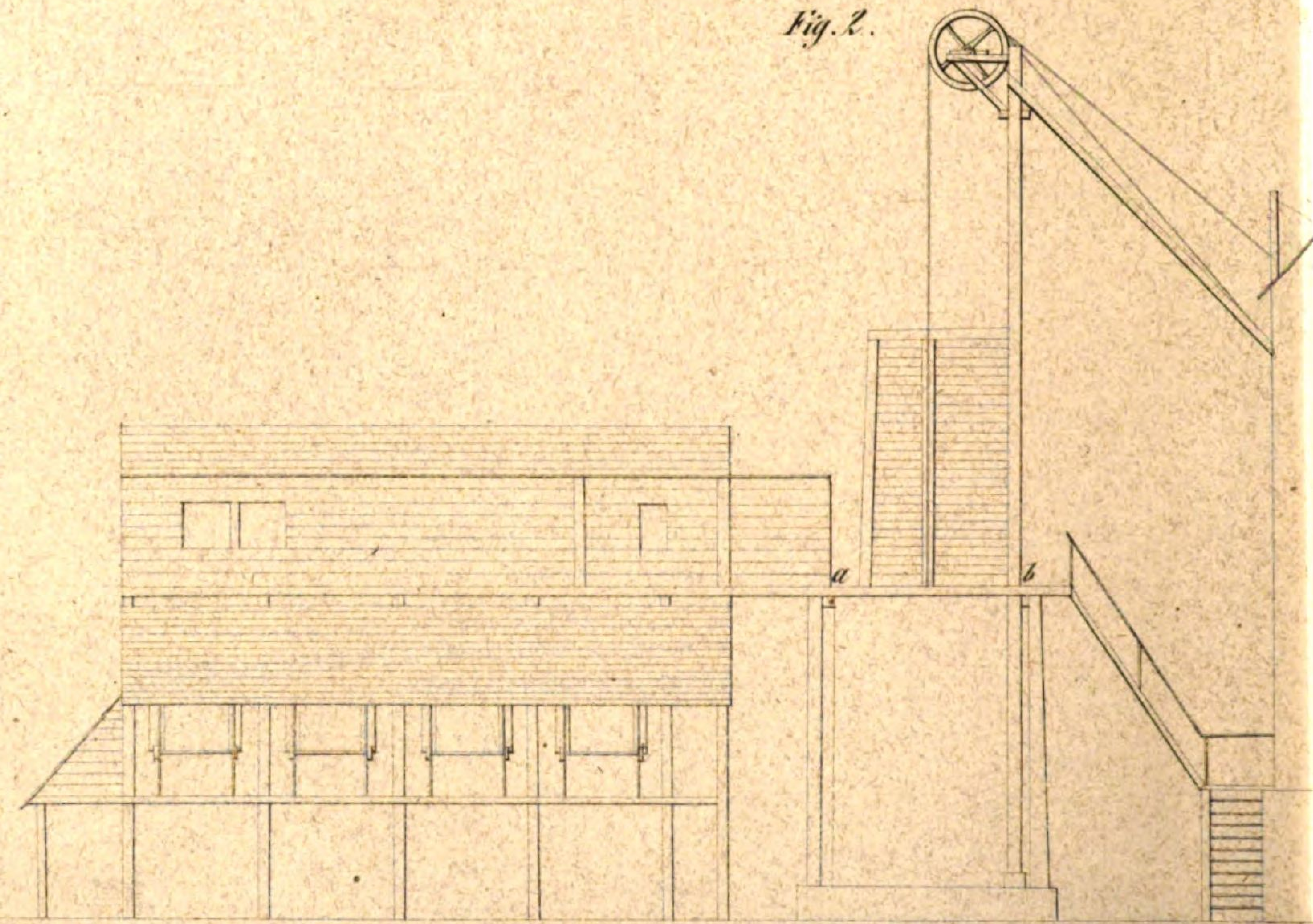
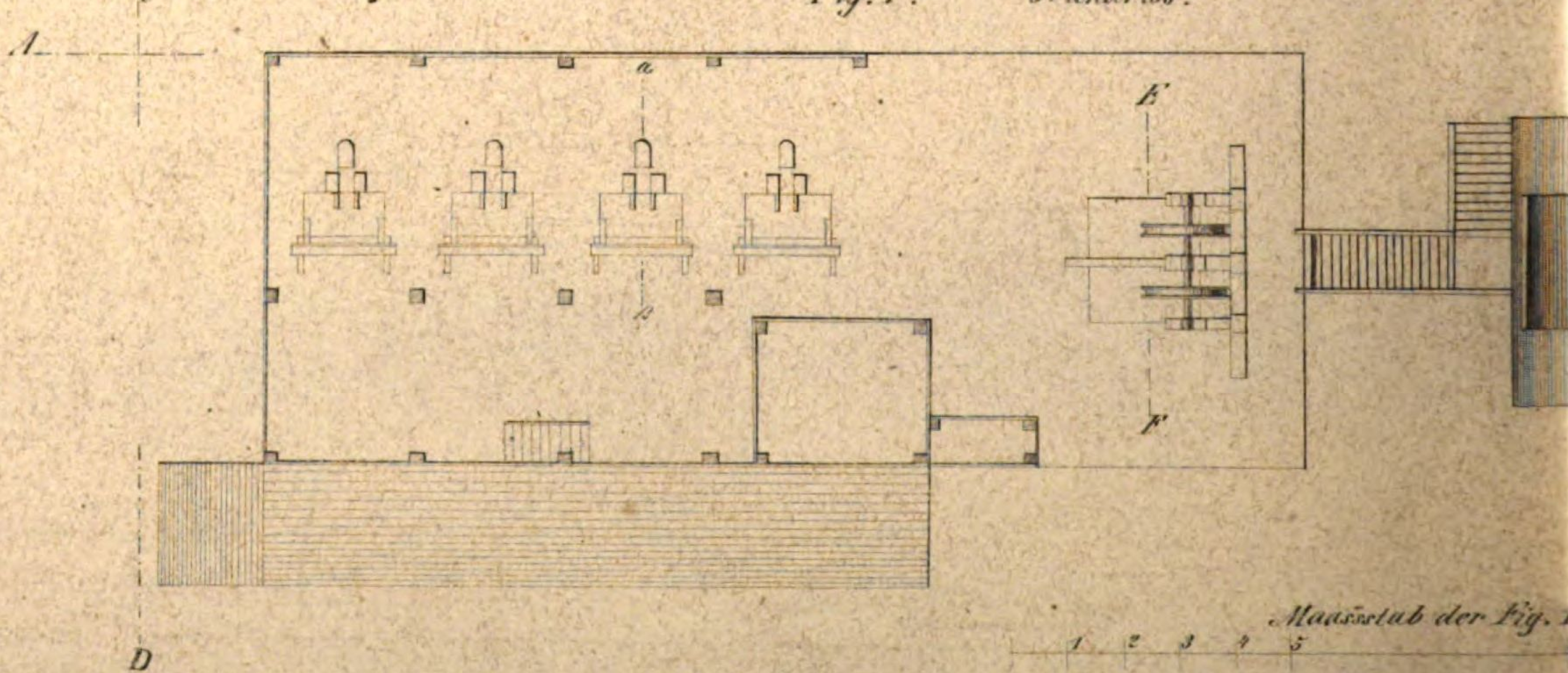


Fig. 1. *Grundriss.*



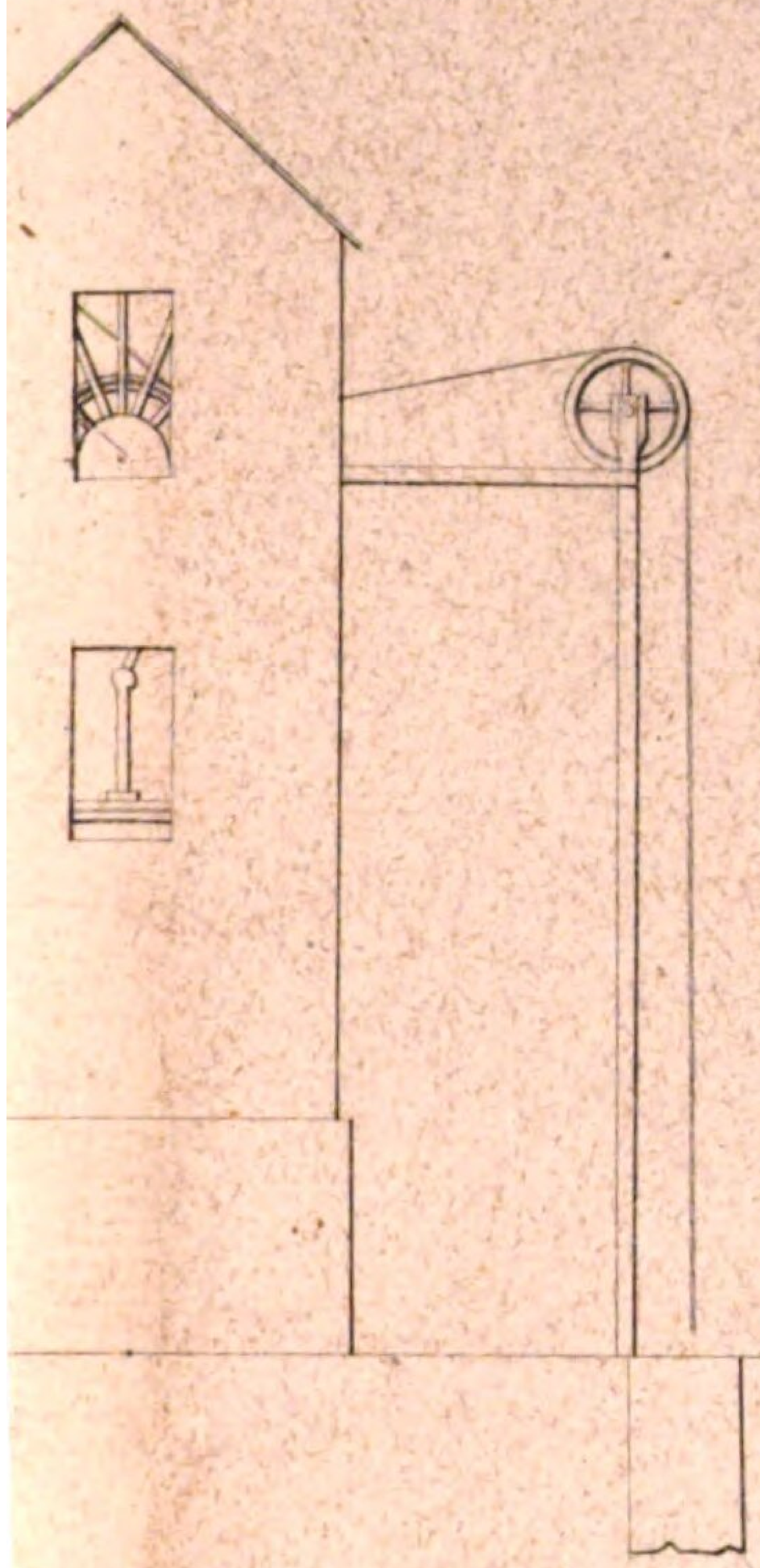


Fig. 4.

Aufriss des Seilscheiben = Gerüstes nach EF.

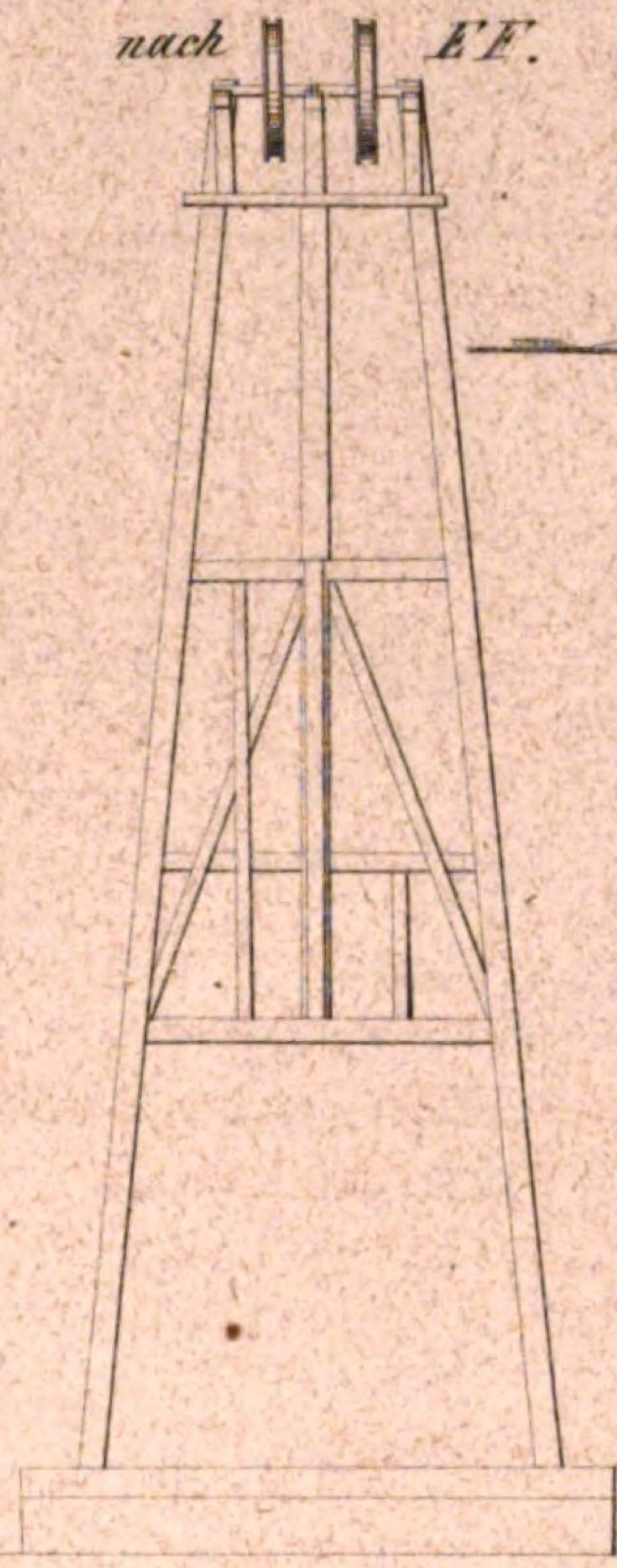
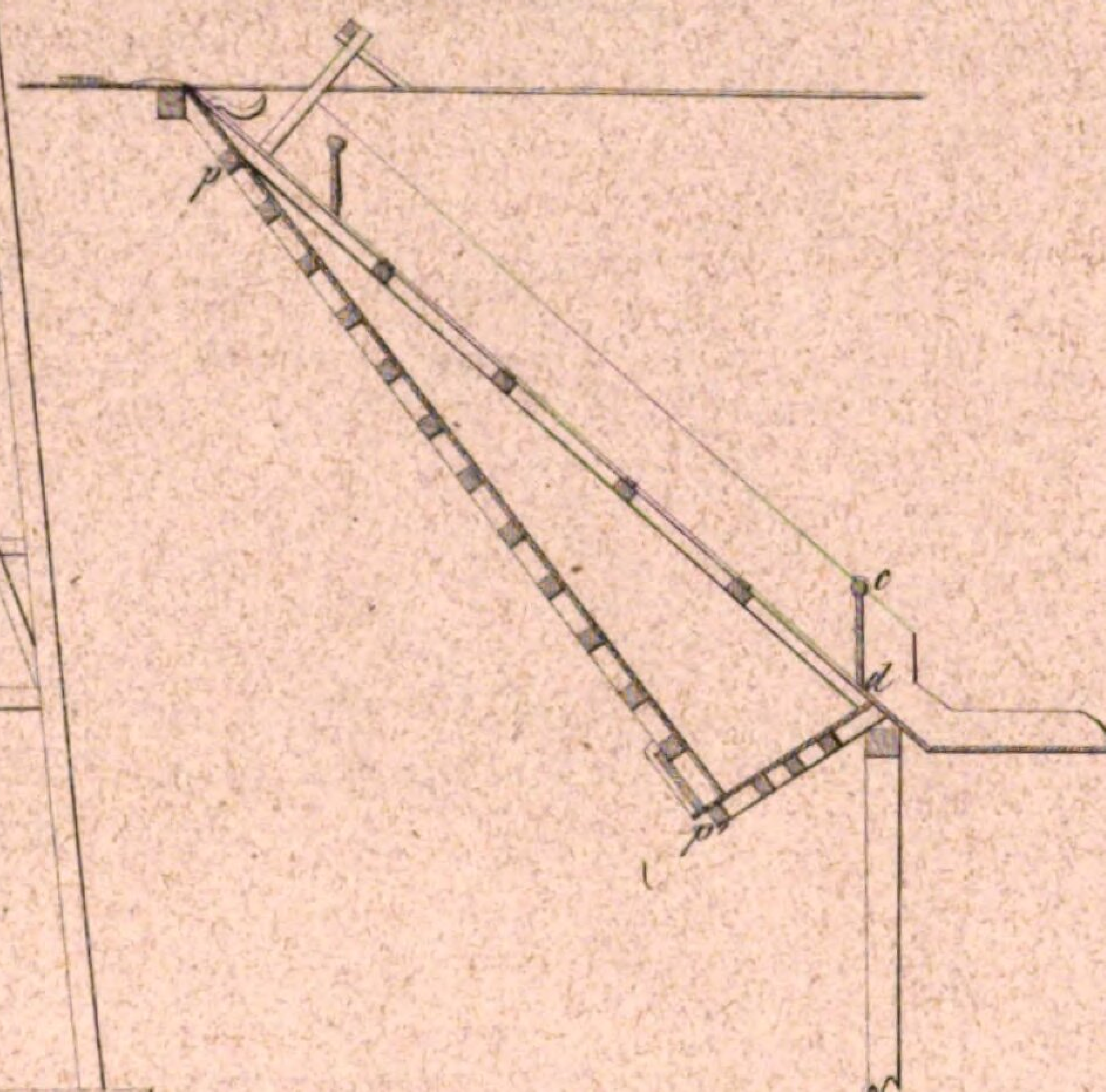


Fig. 5.

Durchschnitt des Rätters nach α, β



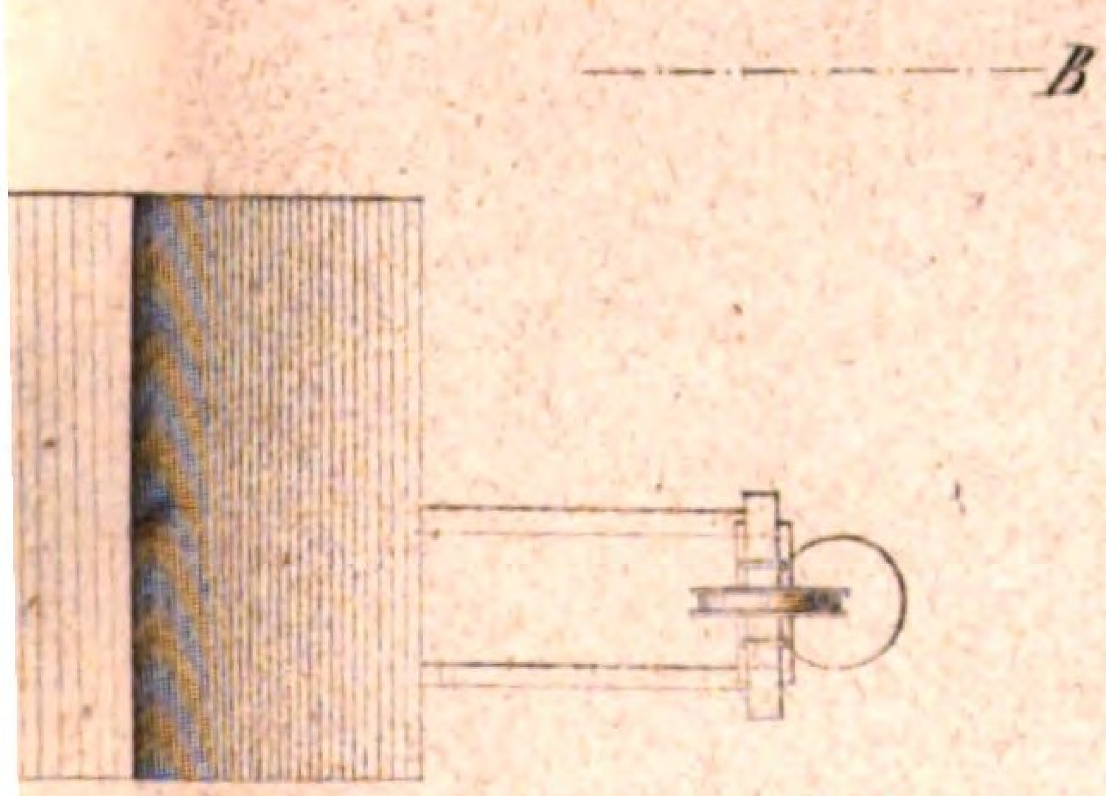
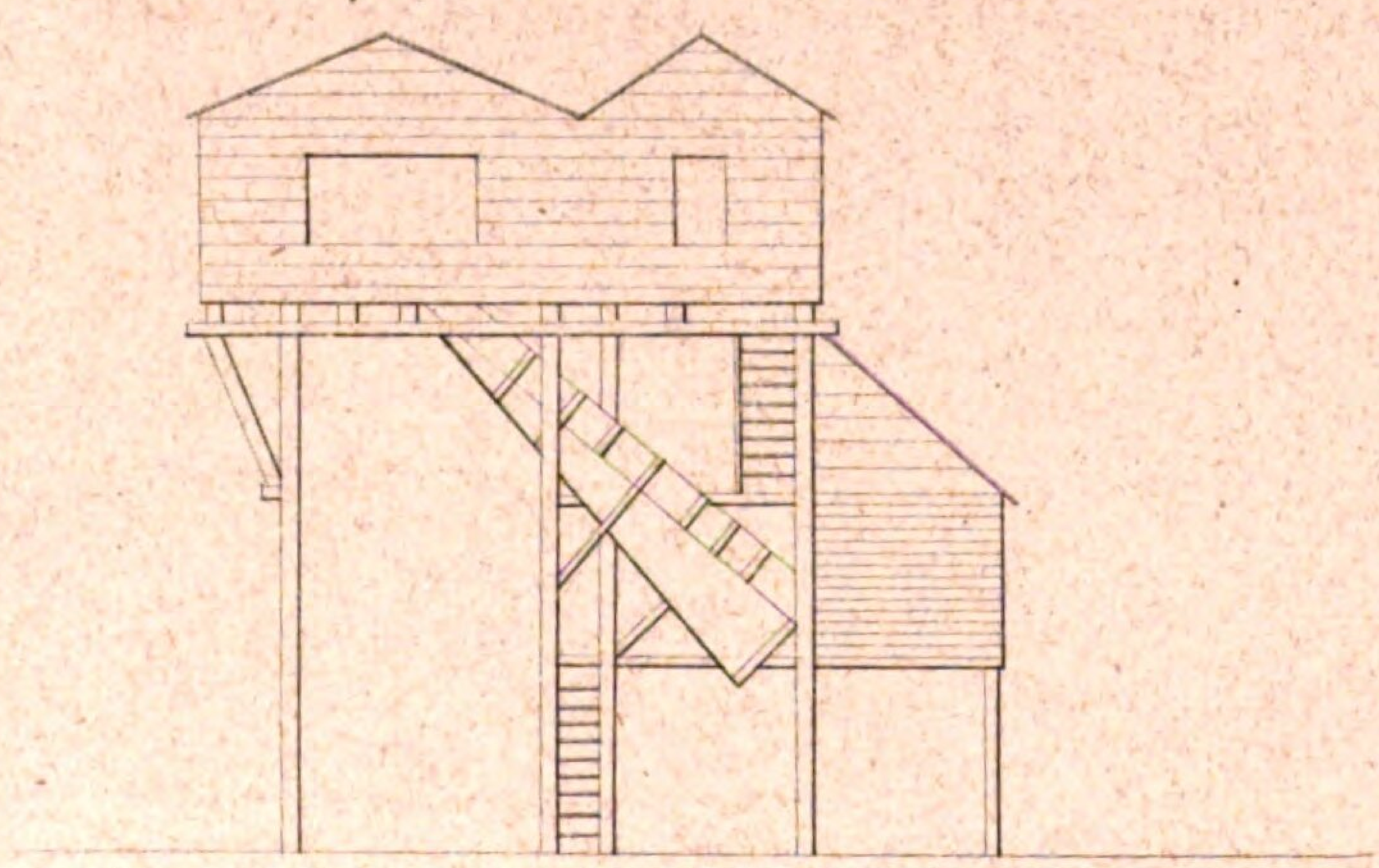


Fig. 3.

Aufriss nach CD.



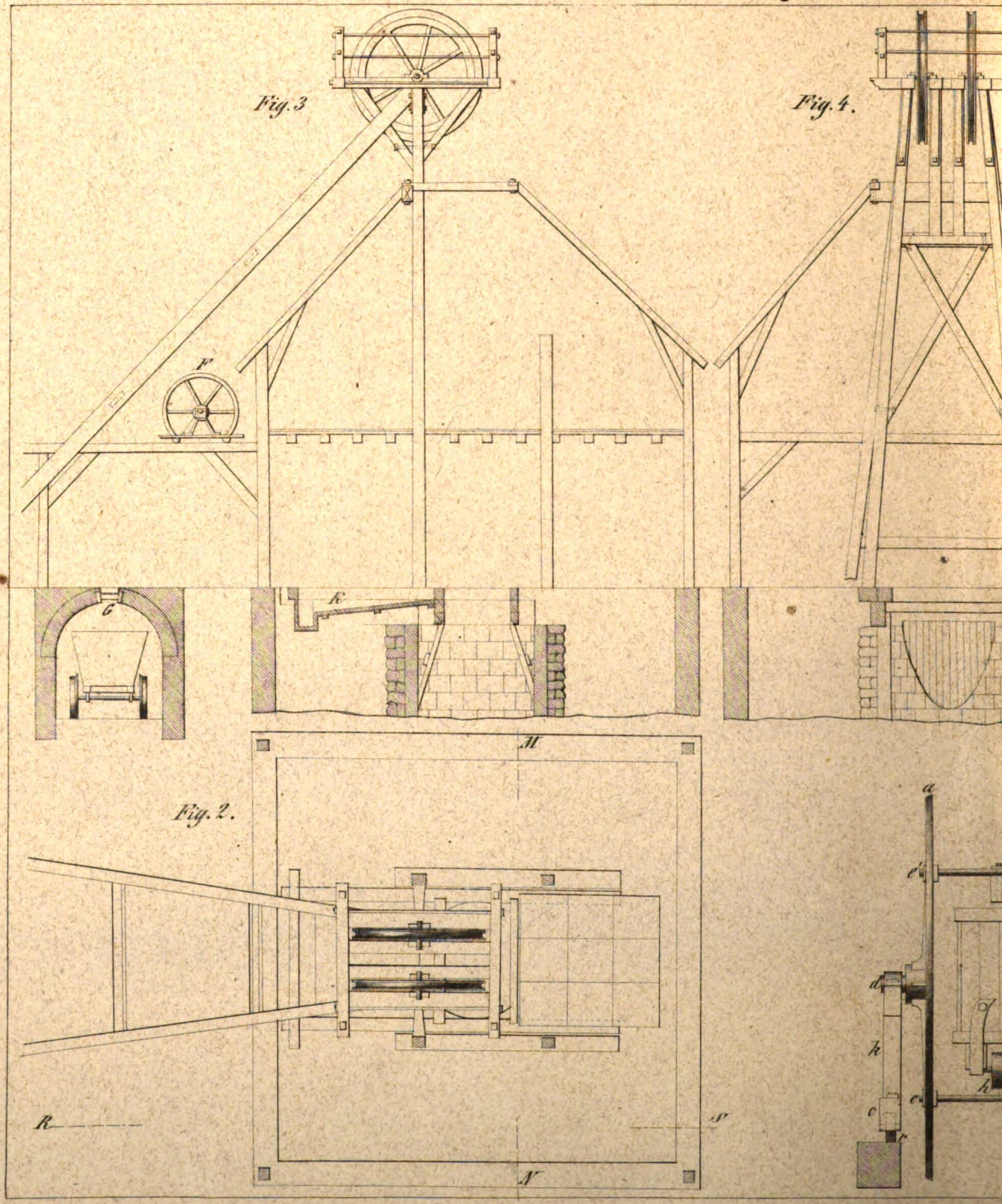
…is 4.

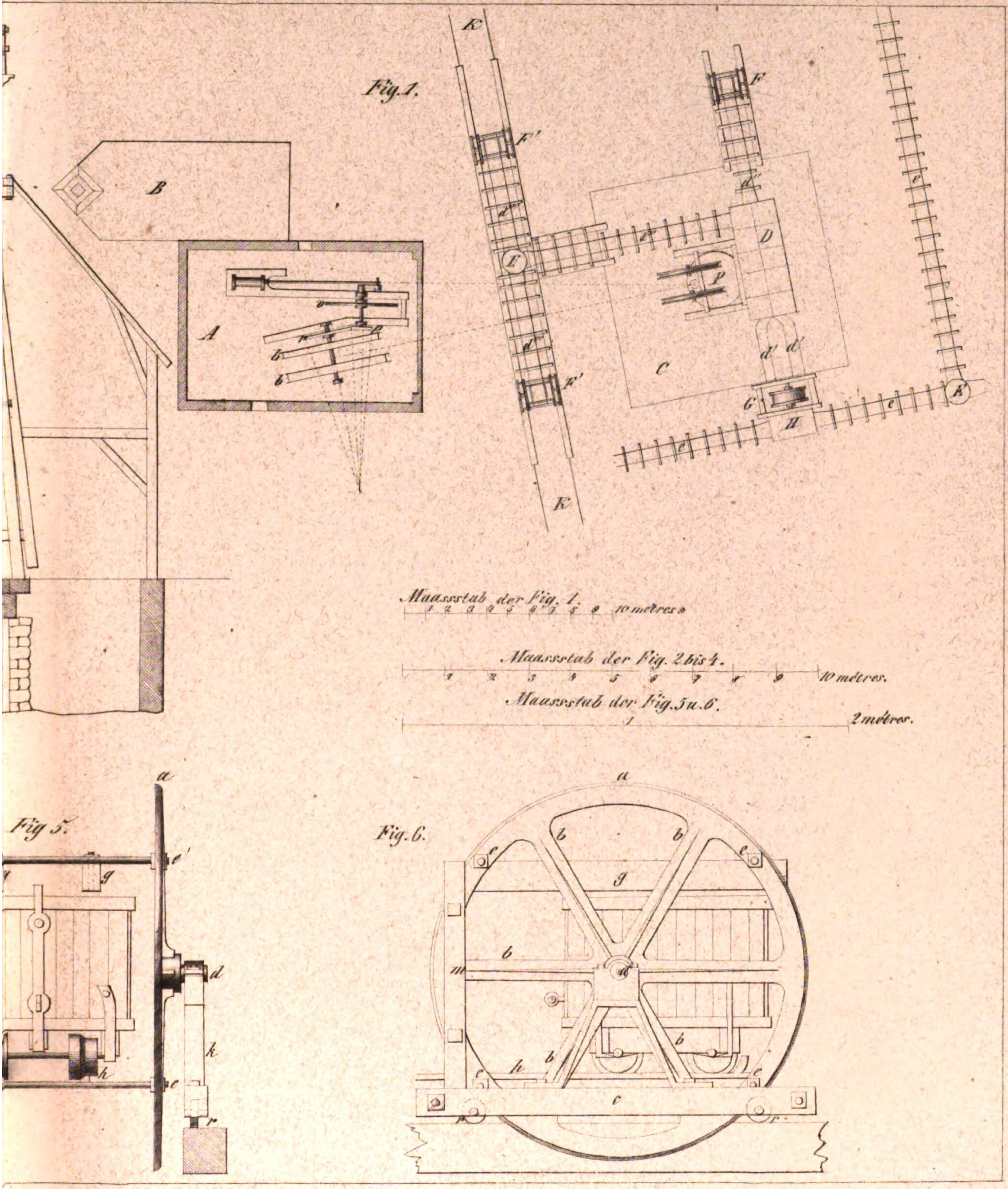
15 mètres.

Maassstab der Fig. 5.

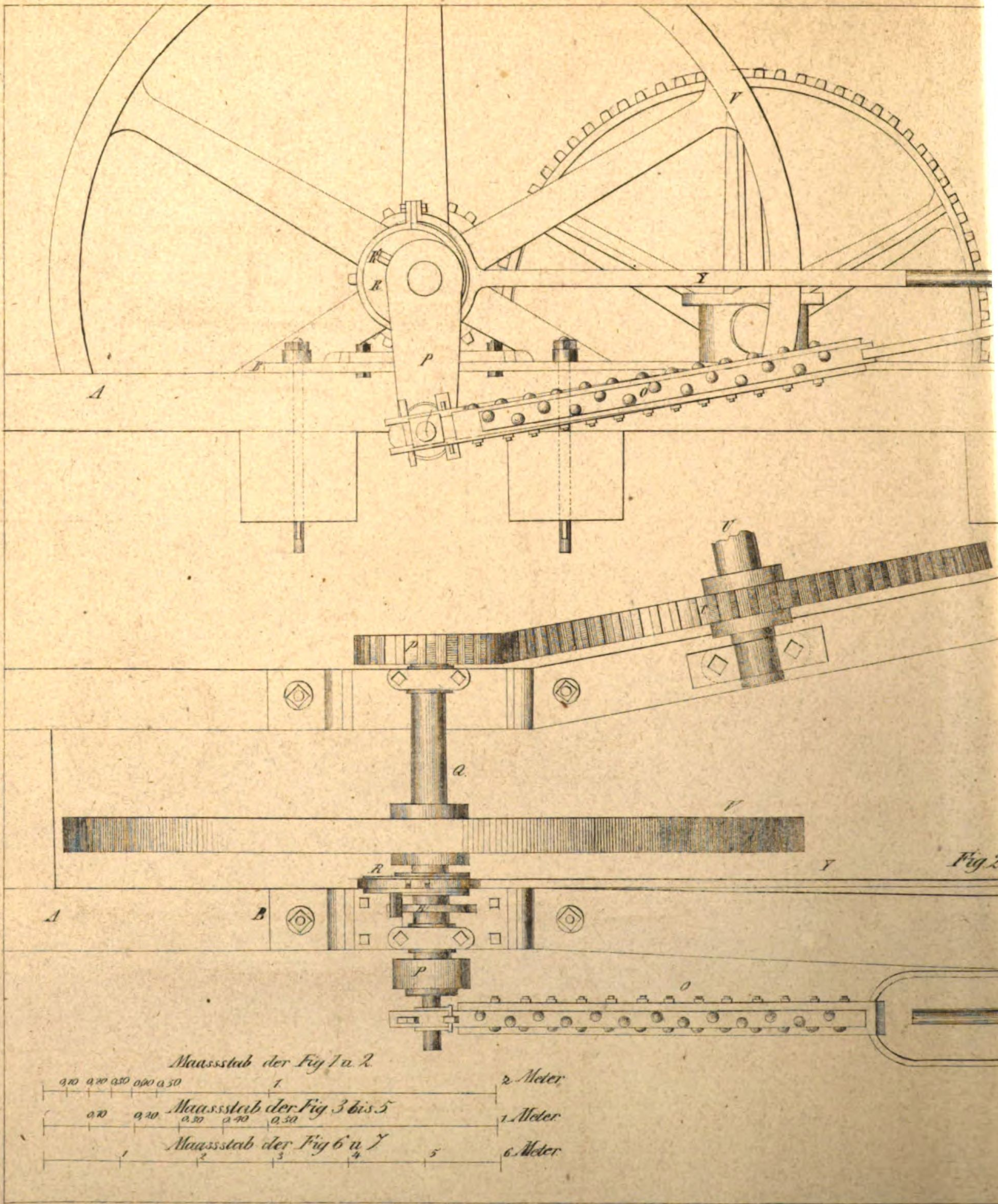
0 1 2 3 4 5 6 7 8 mètres.

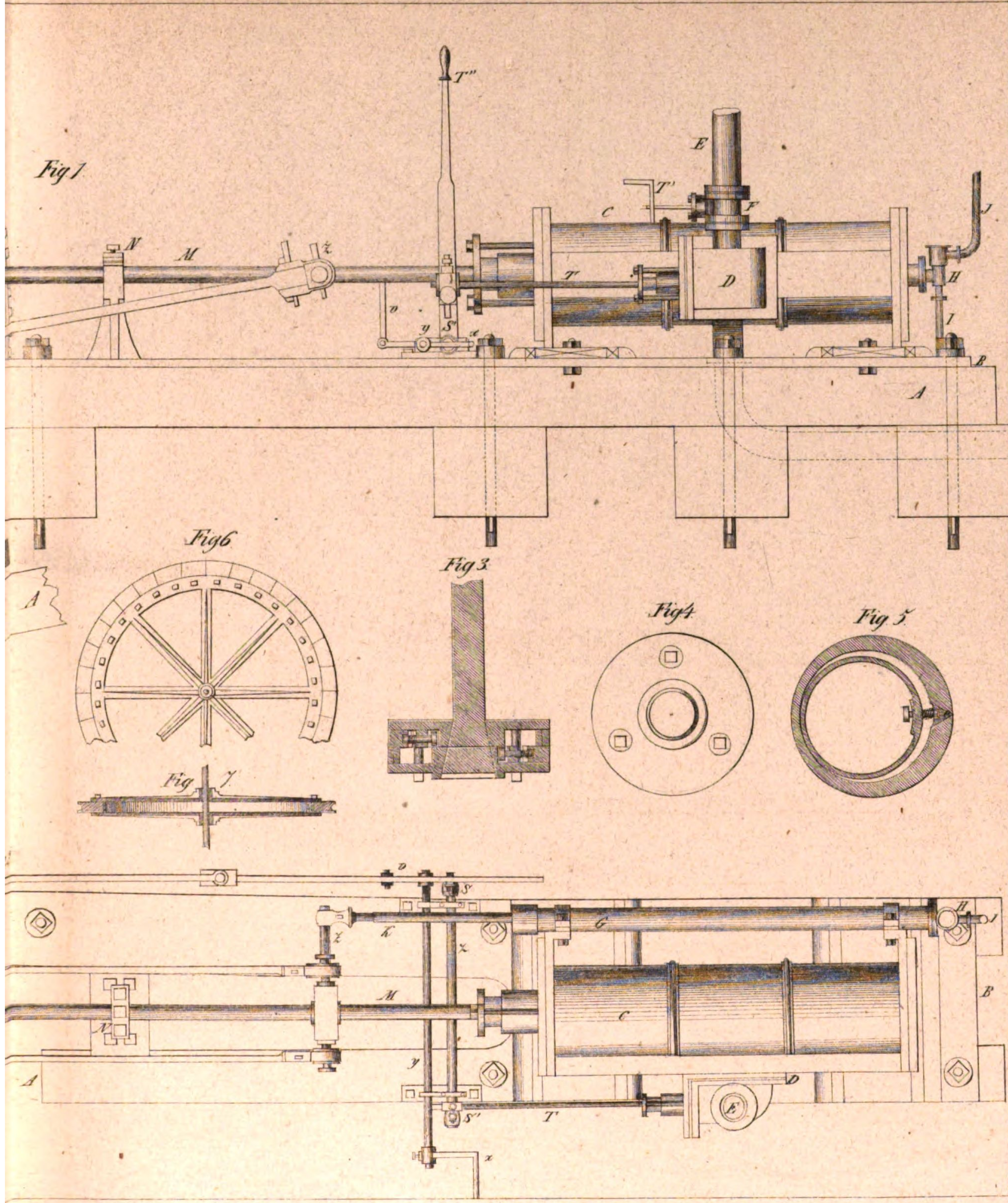
Förderungs=Maschine der




Fig. 1.
A
B
C
D
E
F
F'
G
H
K
Maassstab der Fig. 1.
10 mètres.
Maassstab der Fig. 2 bis 4.
10 mètres.
Maassstab der Fig. 5 u. 6.
2 mètres.
Fig 5.
Fig. 6.

Förderungs Dampfmaschine der (




Fig 1
Fig 6
Fig 3
Fig 4
Fig 5
Fig 7
A
B
C
D
E
F
H
J
M
N
T
T'
T''

Förderungs-Dampfmaschine d

Fig. 1.

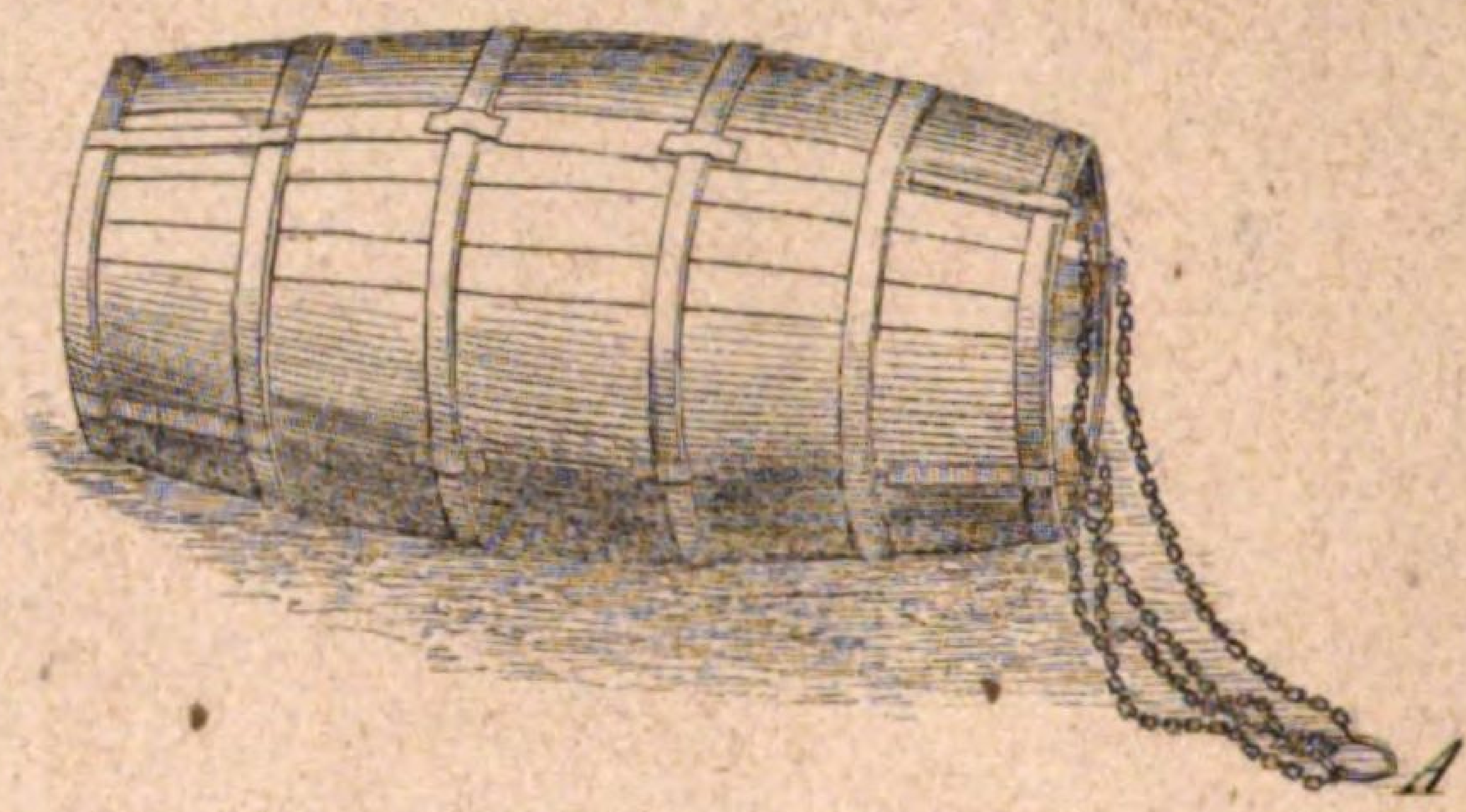


Fig. 2.

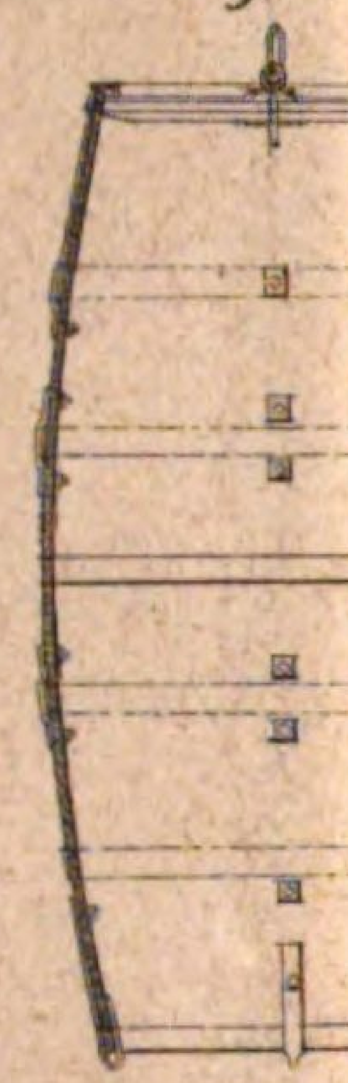


Fig. 4.

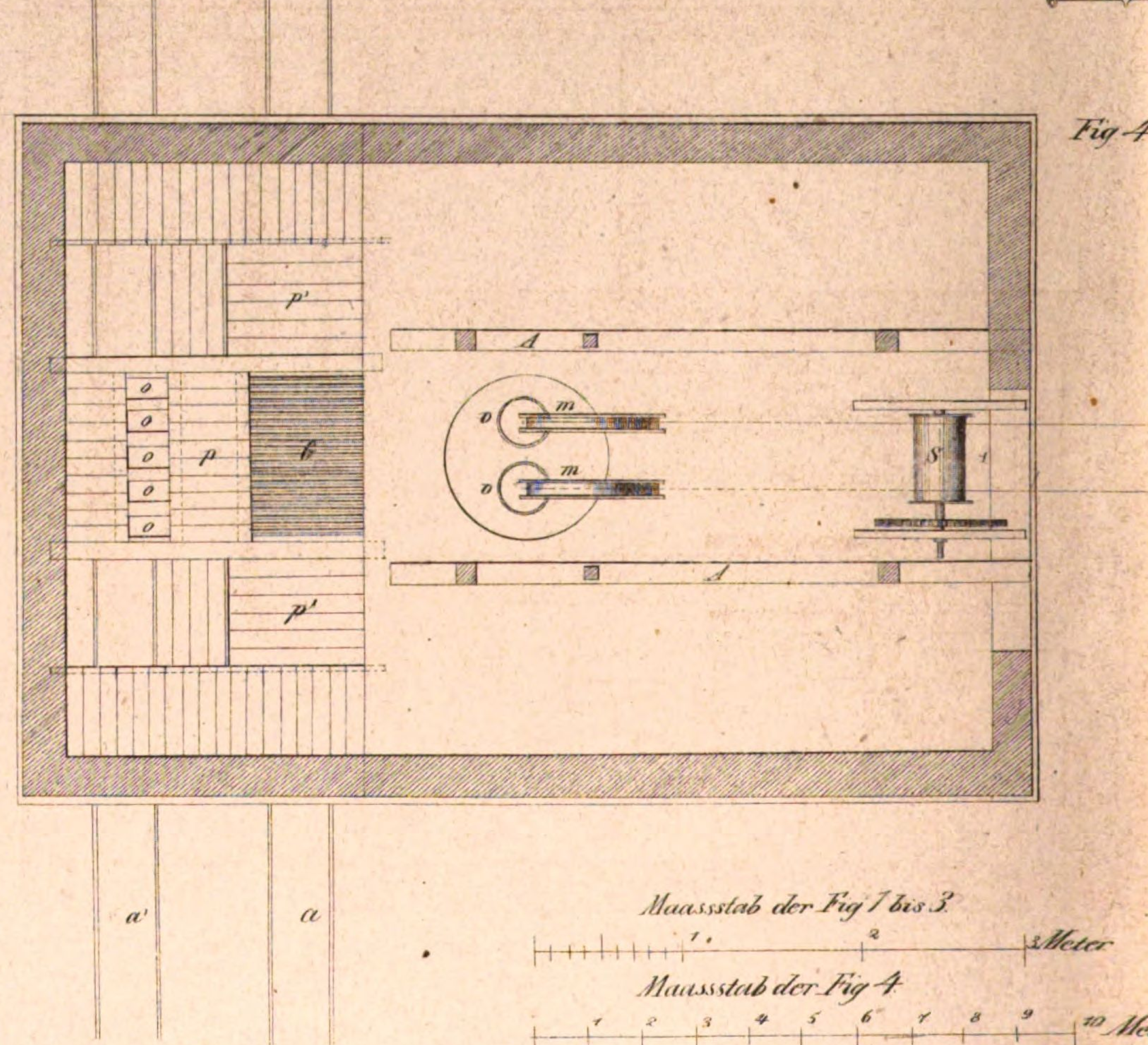
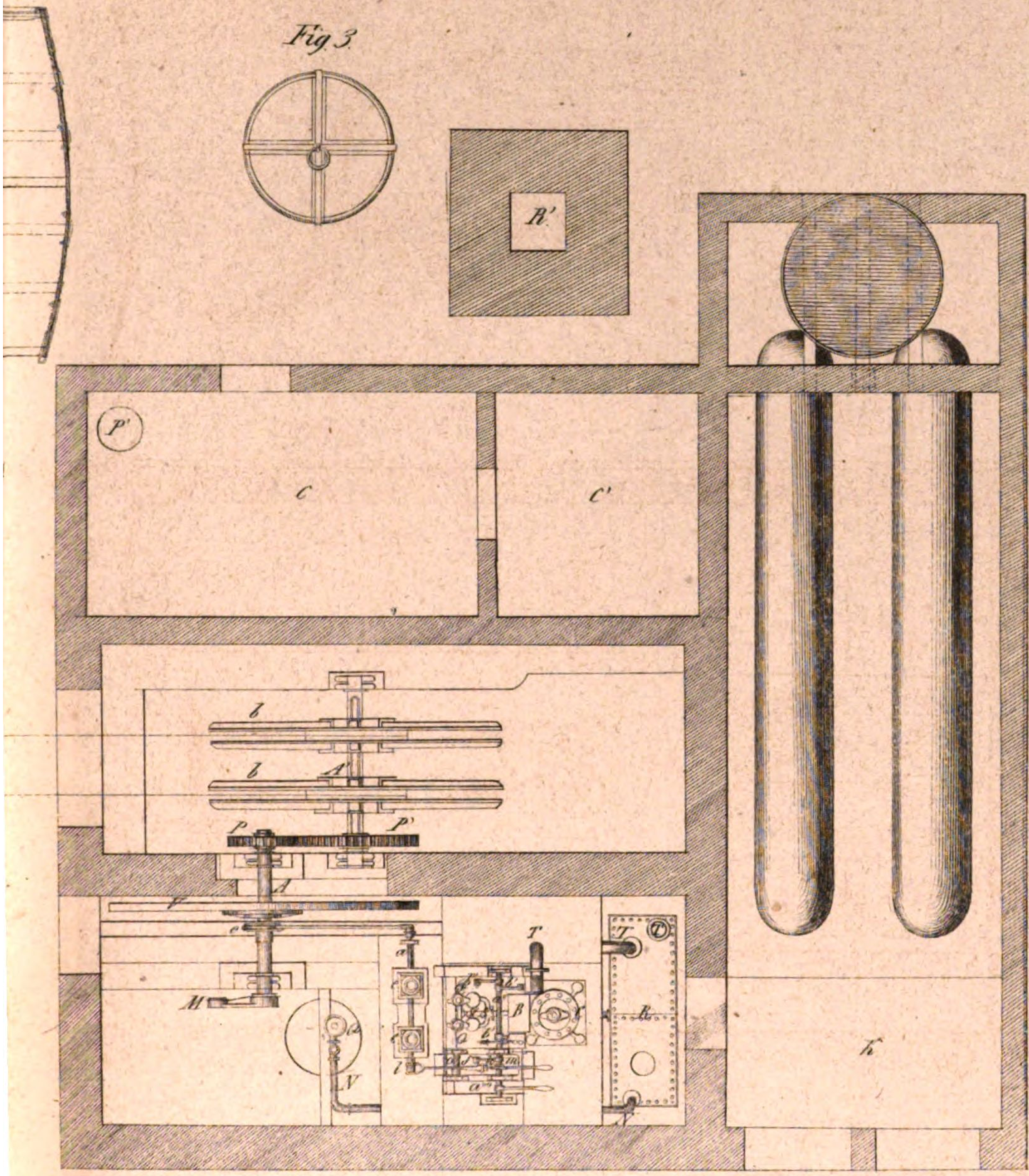


Fig. 3.



Förderungs=Dampfmaschi

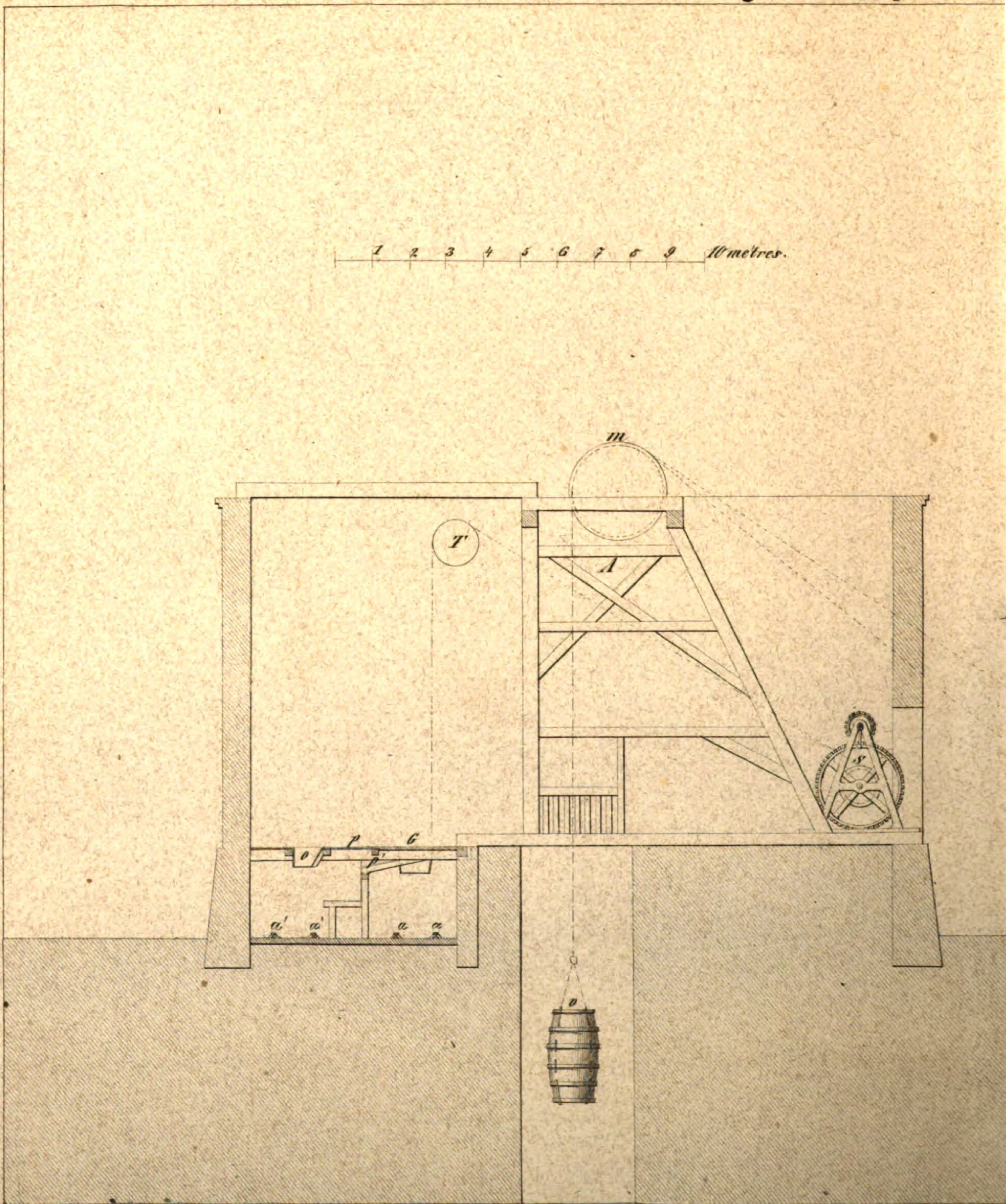


Fig. 2.

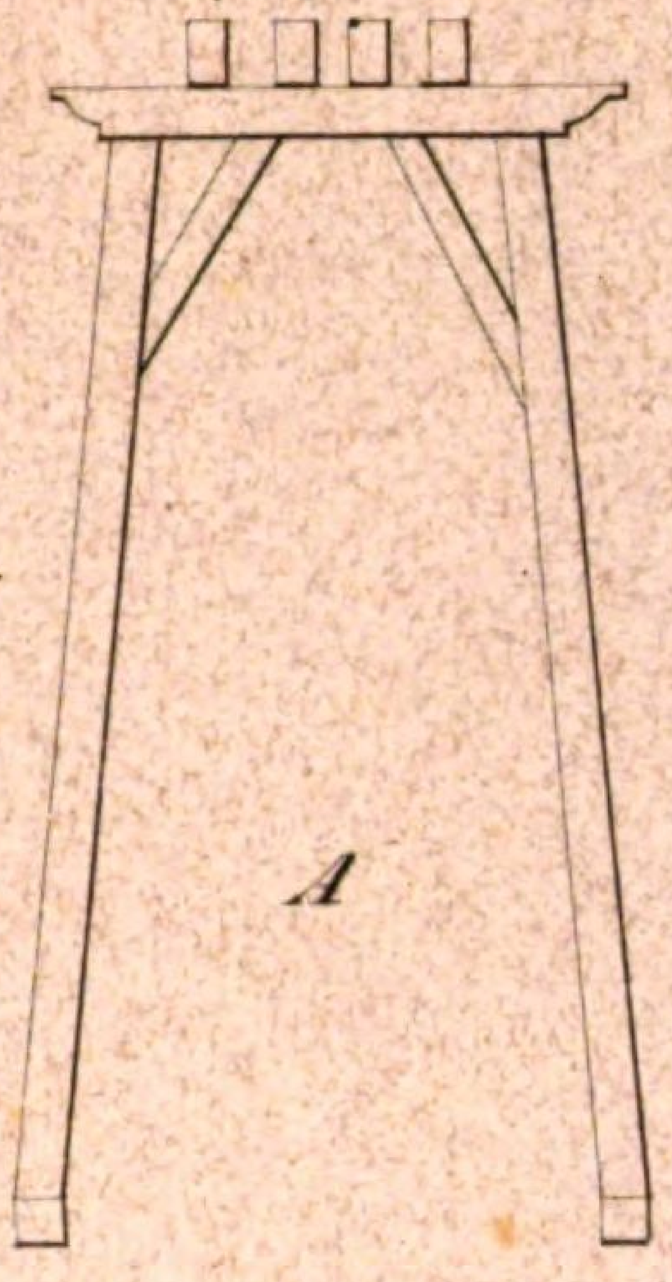


Fig. 3.

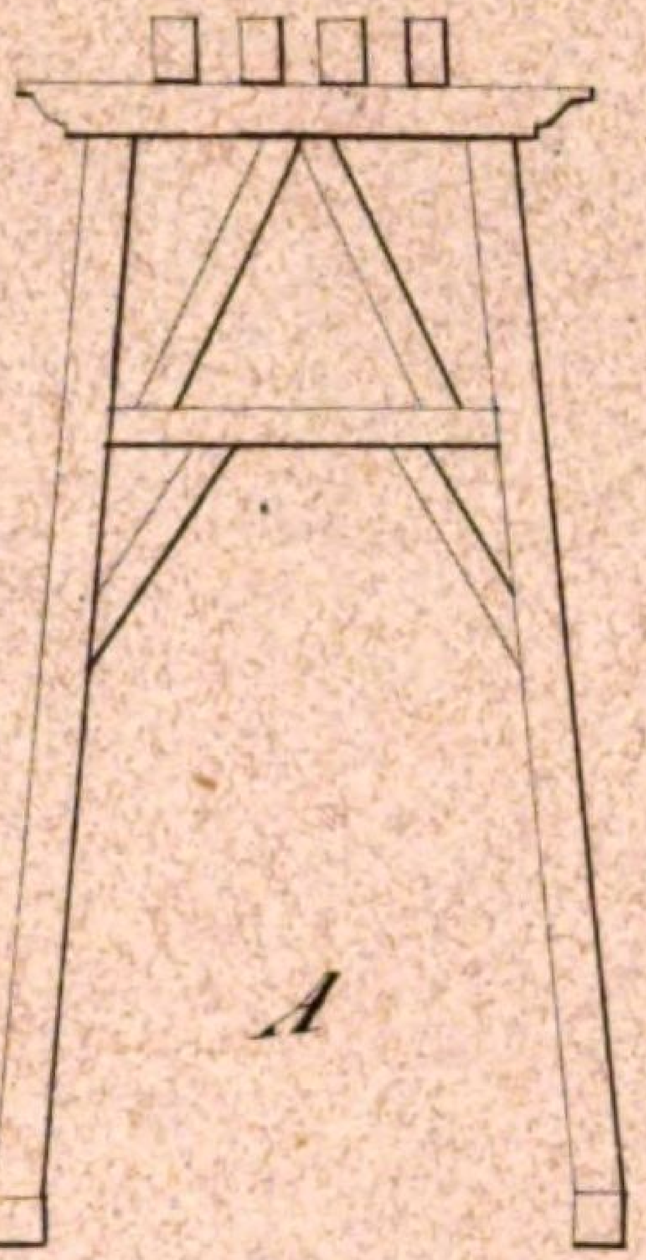
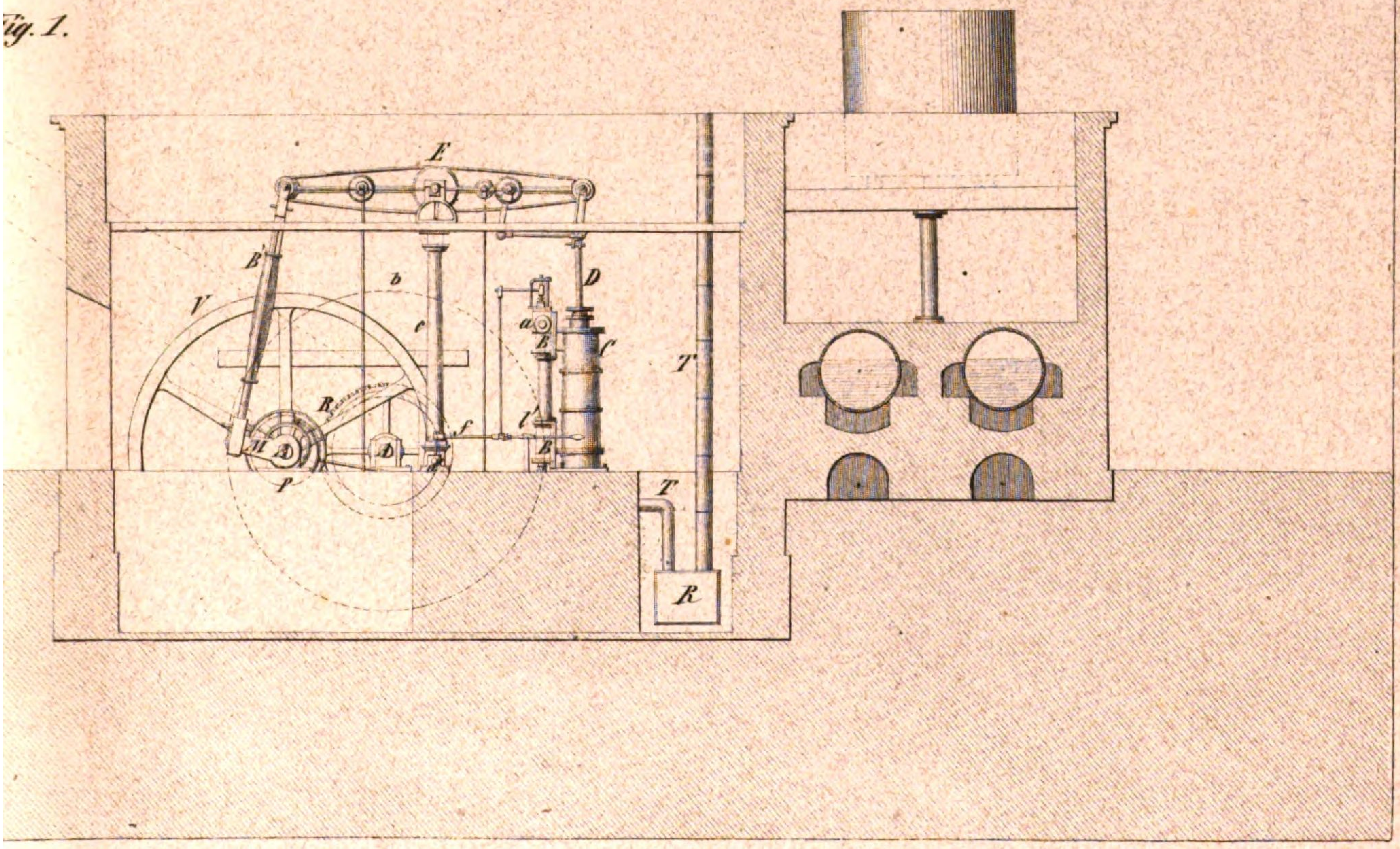
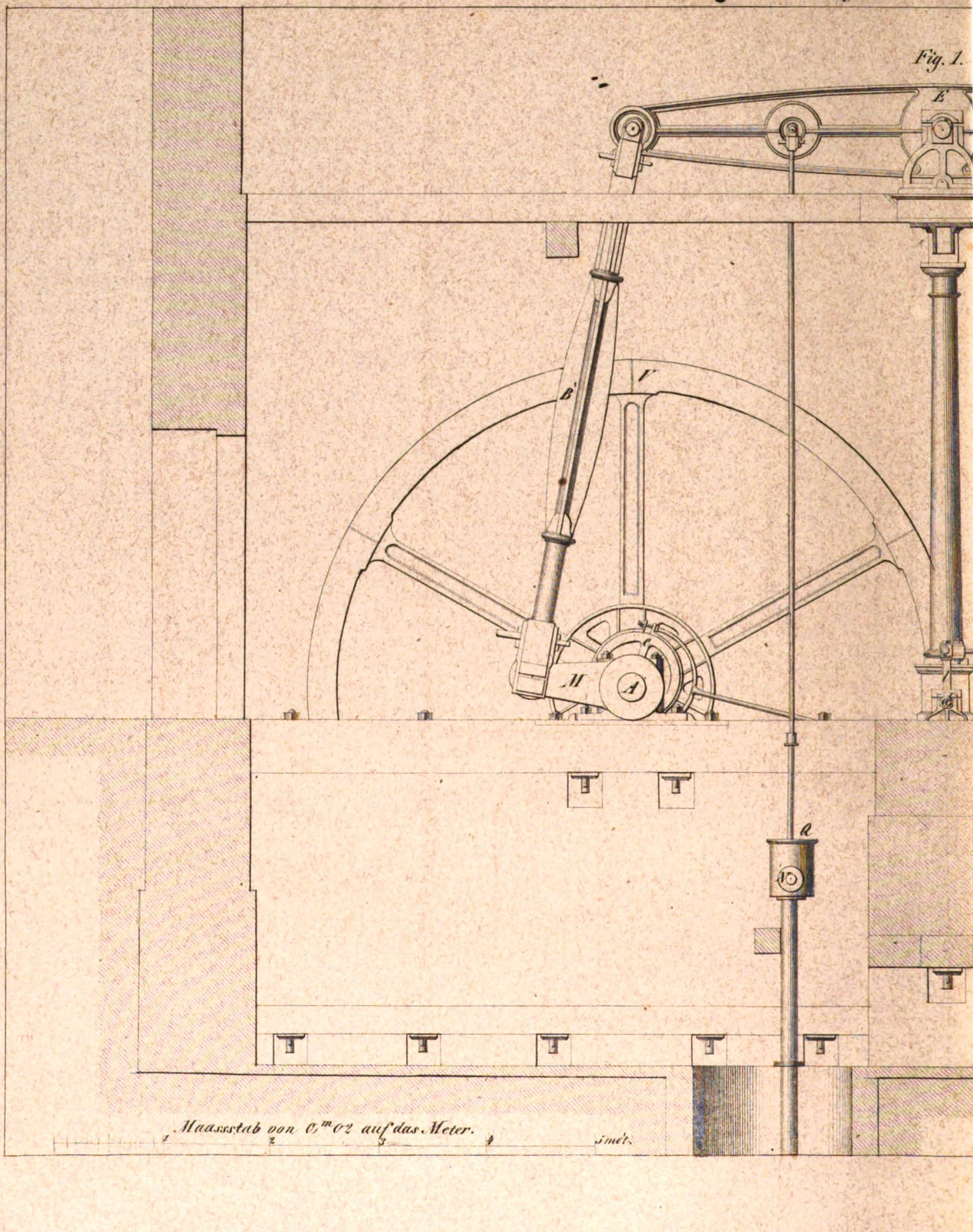


Fig. 1.



Förderungs =Dampfmaschin



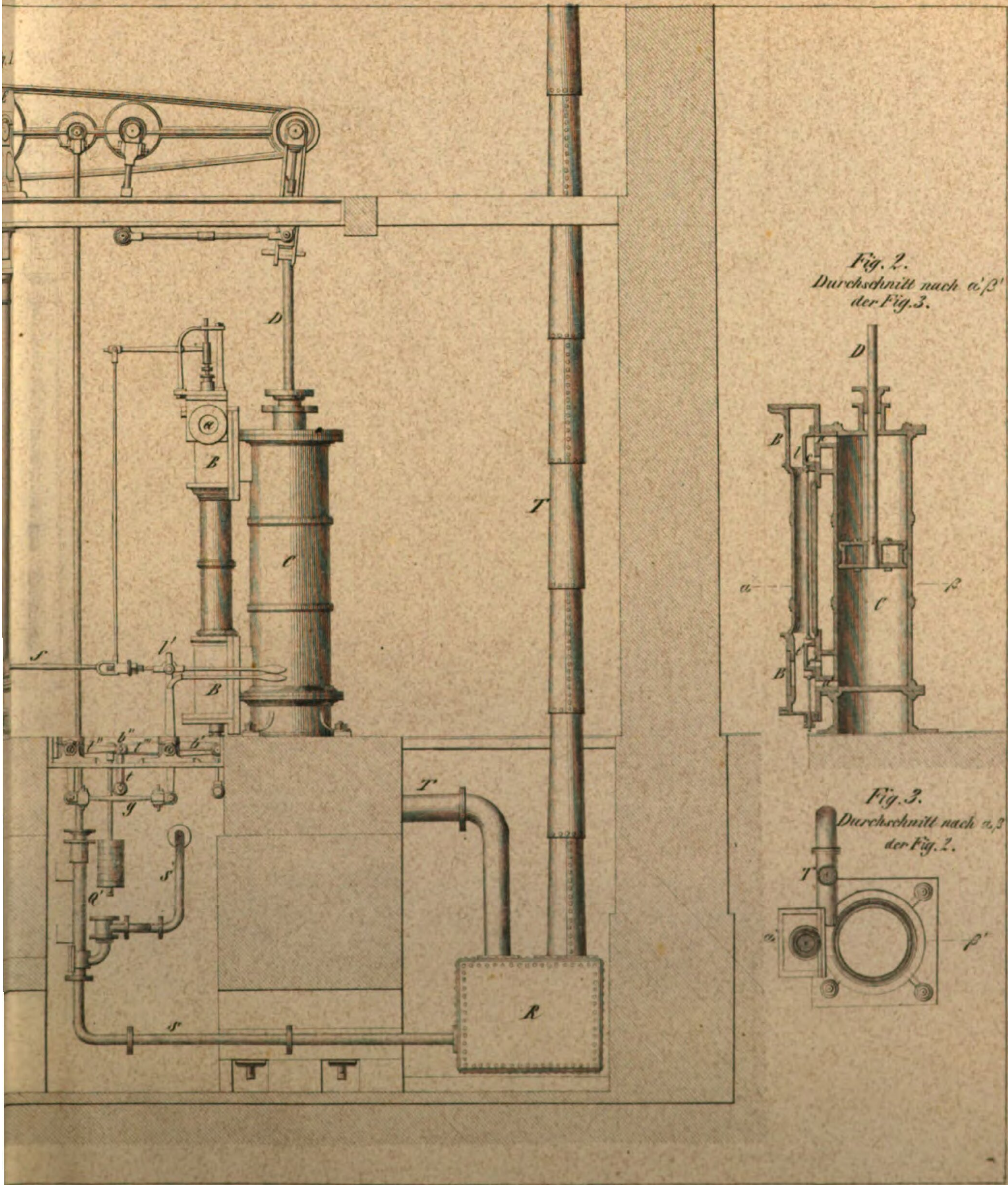

Fig. 2.
Durchschnitt nach α'β' der Fig. 3.
D
B
C
α
β
Fig. 3.
Durchschnitt nach α,β der Fig. 2.
T
α'
β'
D
B
C
T
T'
R
s
s'
g
a'

Fig. 1

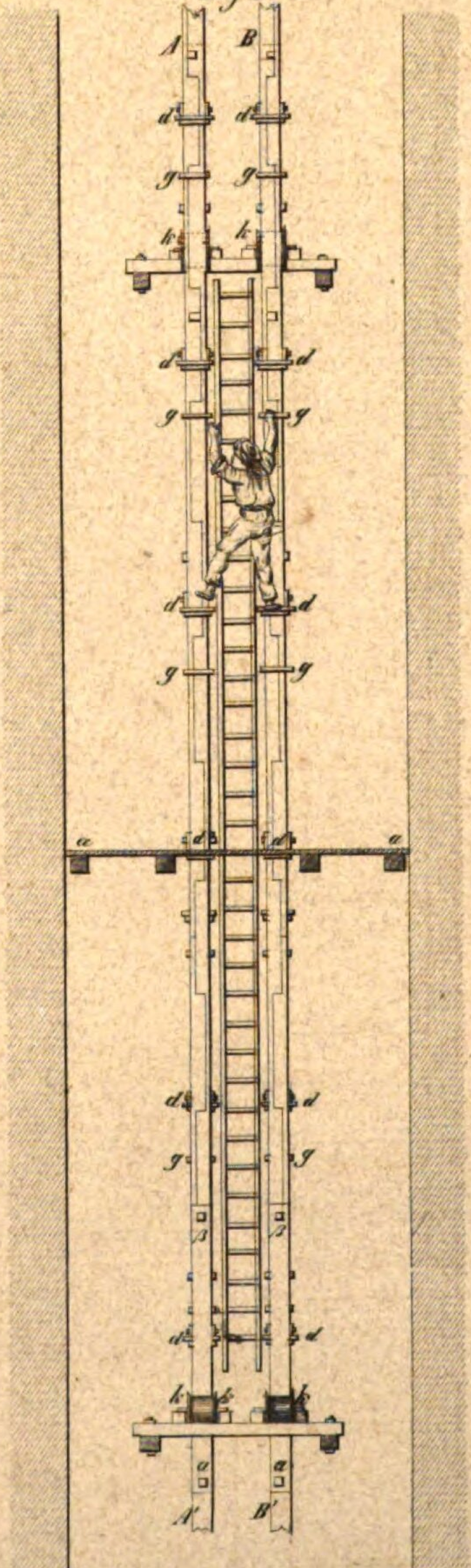


Fig. 2.

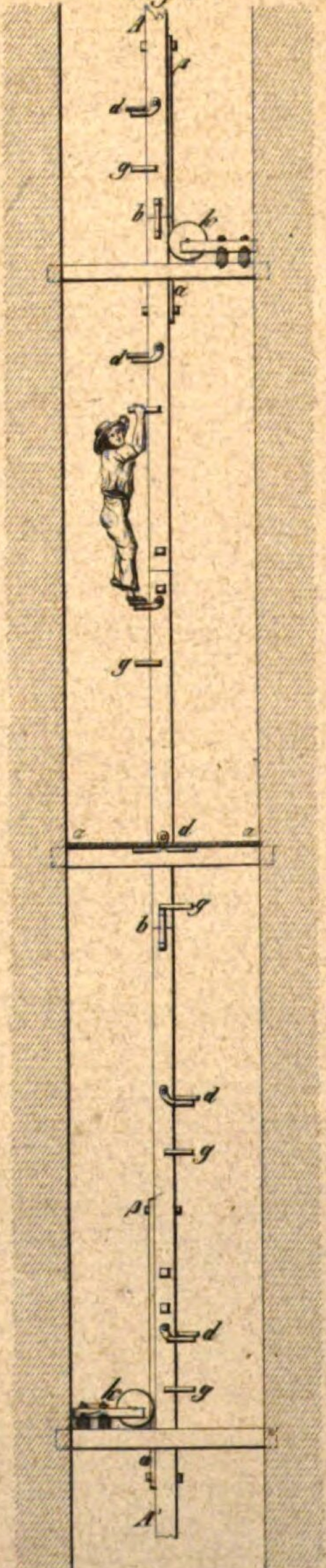


Fig. 3.

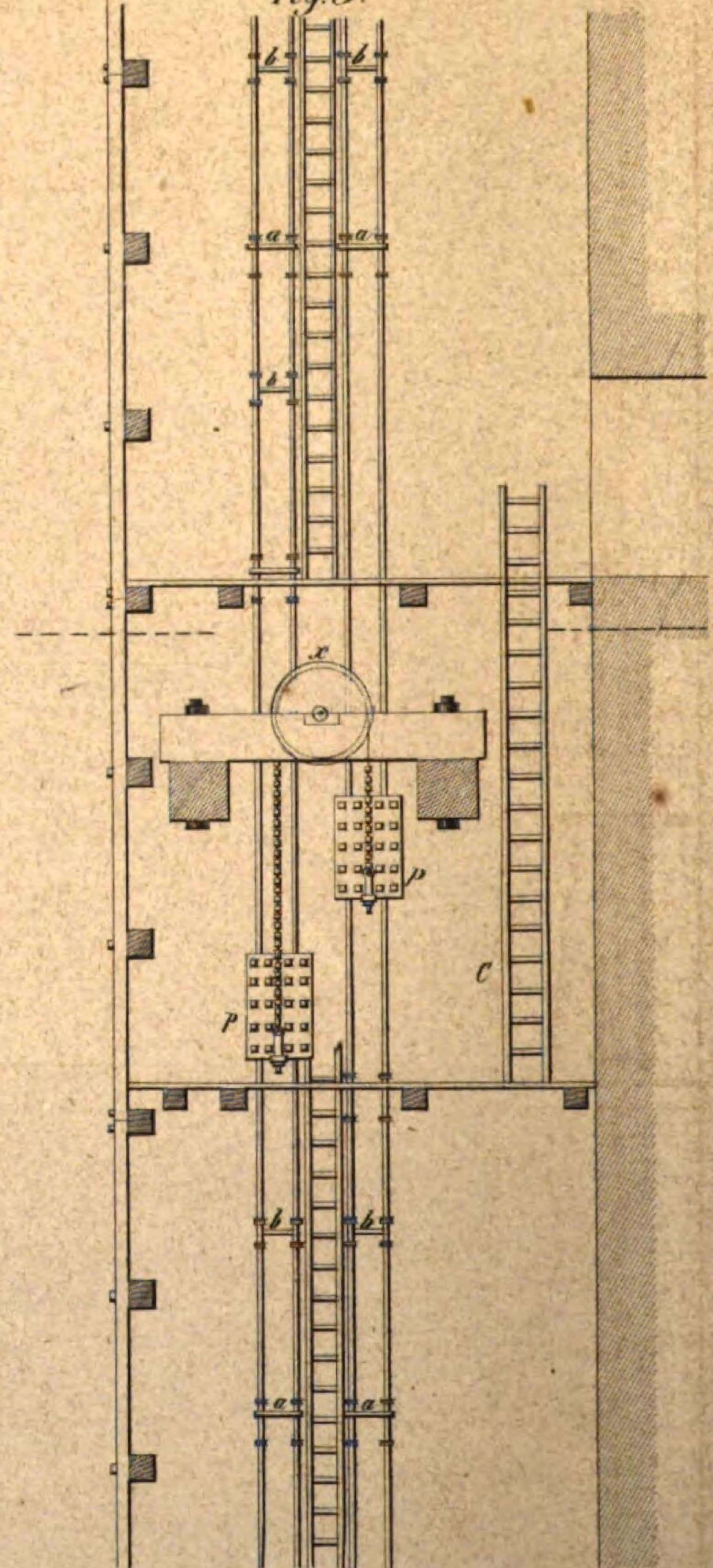
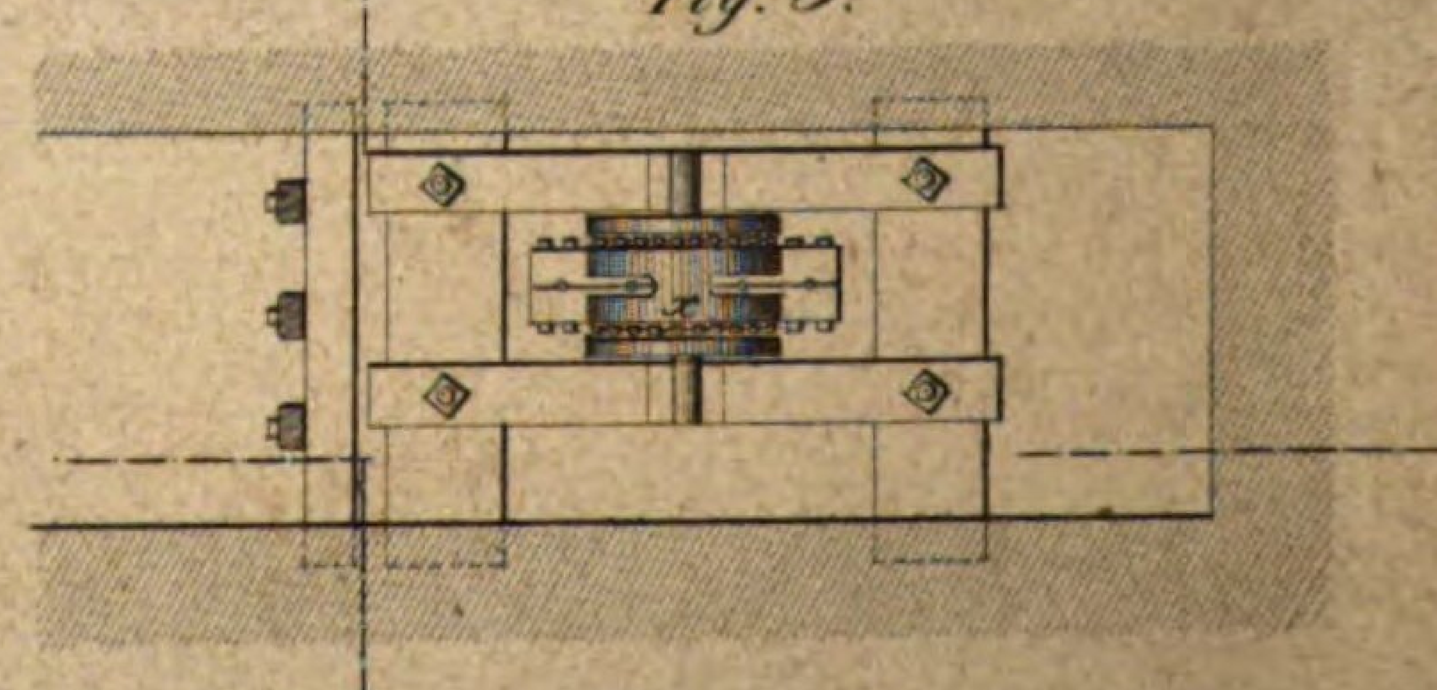


Fig. 5.



Maassstab für die Fig. 1 bis 5.

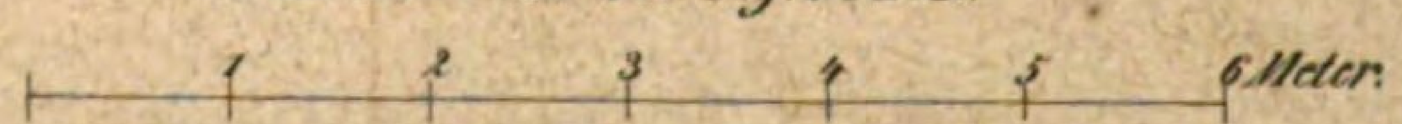


Fig. 4.

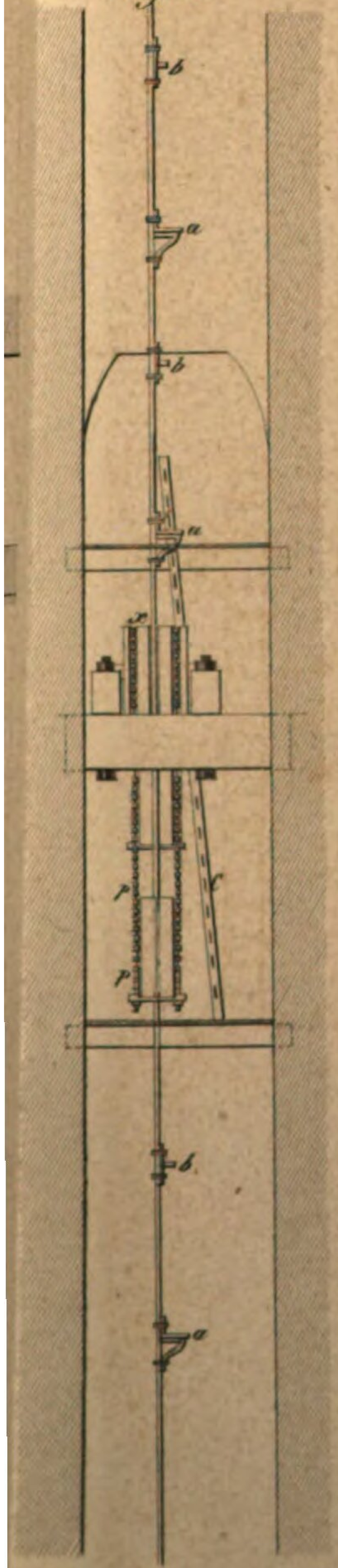


Fig. 6.

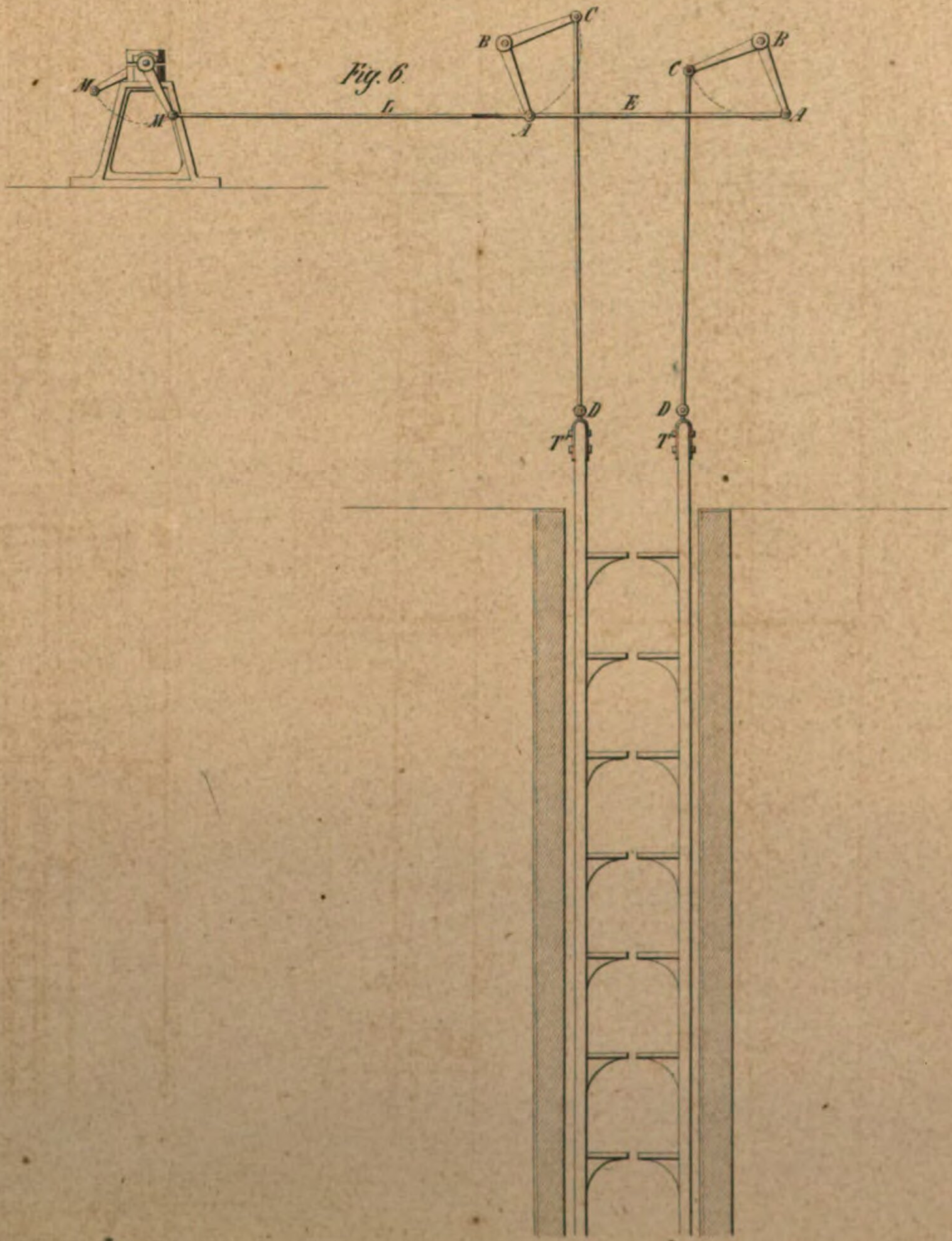
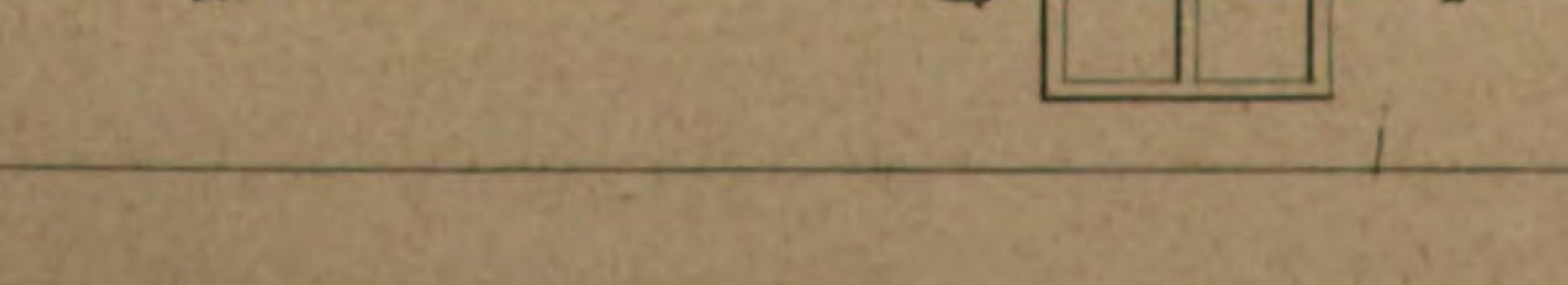


Fig. 7.



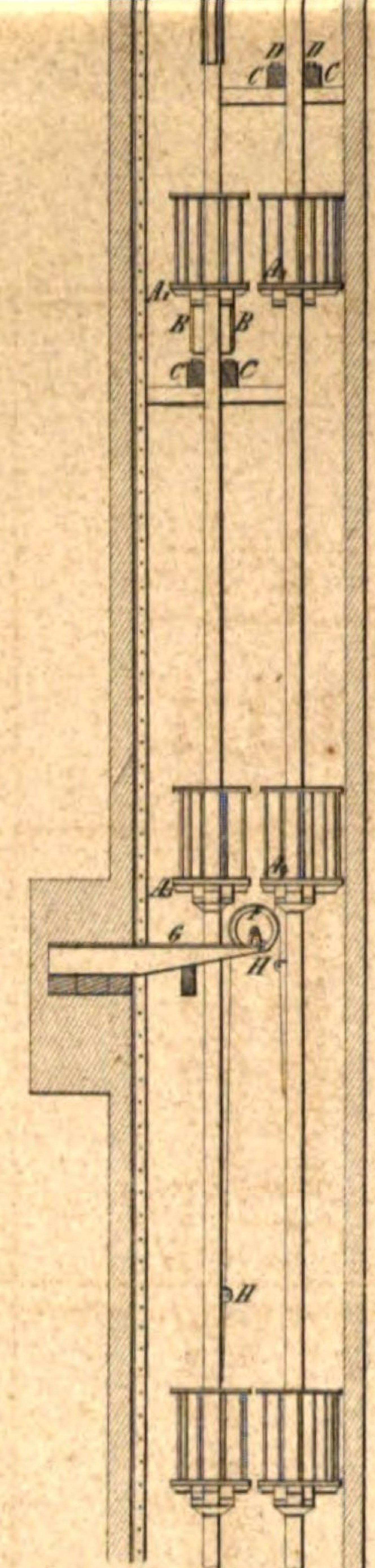


Fig. 3.
Senkrechter Durchschnitt der Bühnen.

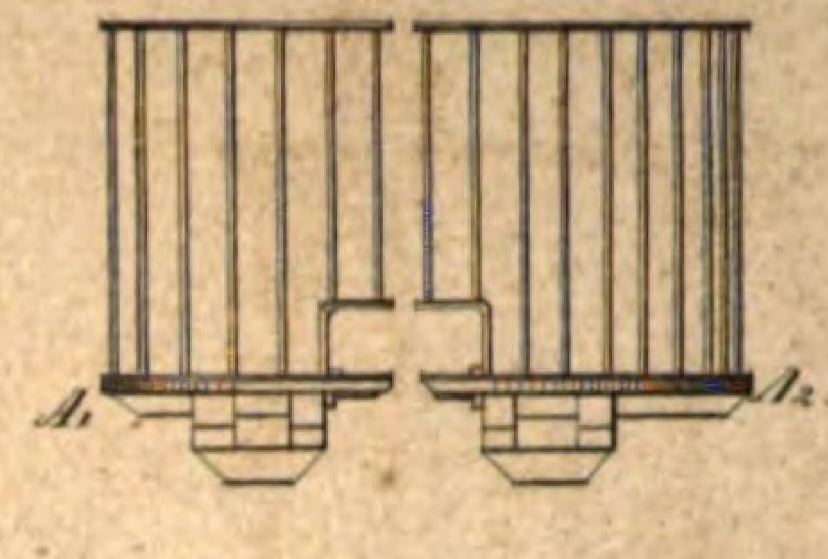
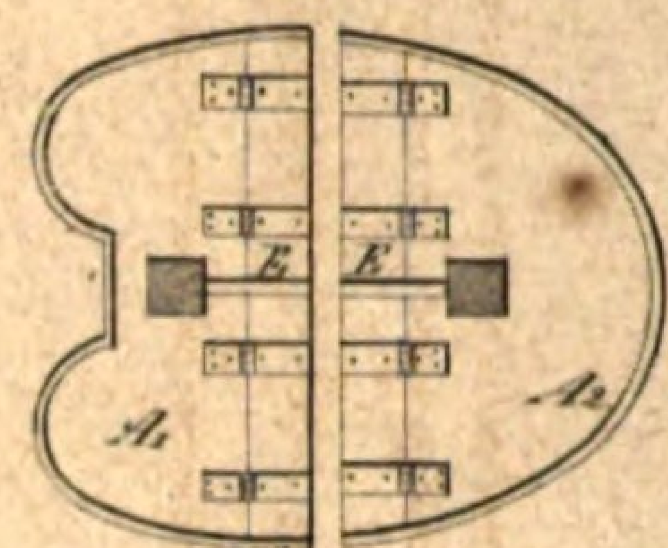


Fig. 5.
Grundriss der Bühnen.



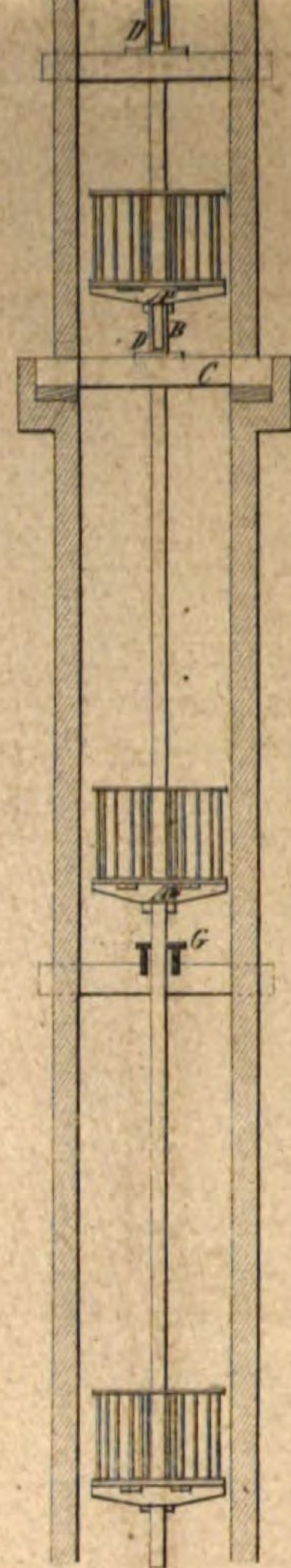


Fig. 4.



Fahr-kunst Waroeque's

Fig. 1.

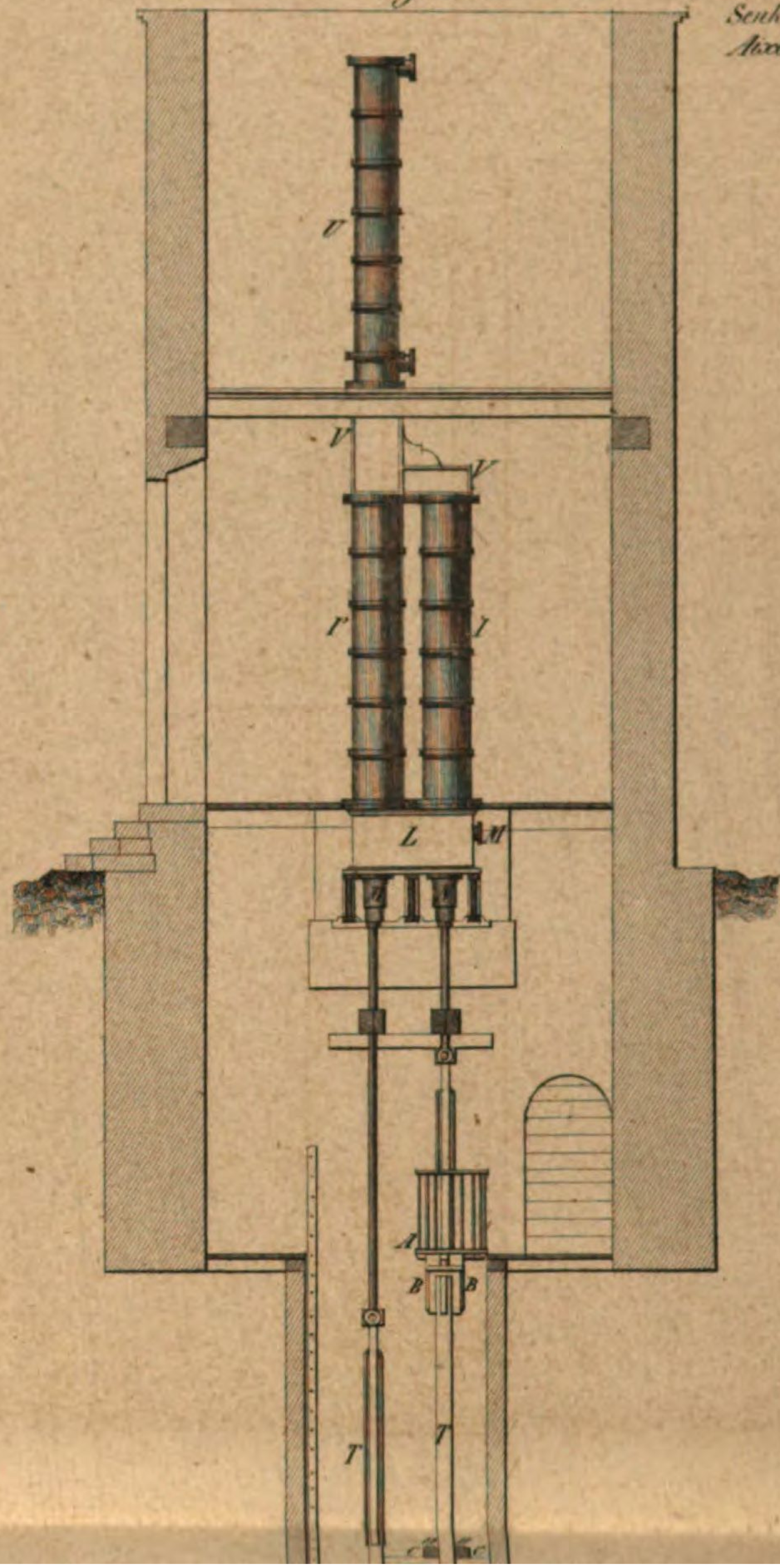


Fig. 6.

Senkrechter Durchschnitt durch die Axe der beiten Cylinder der Fig. 1.

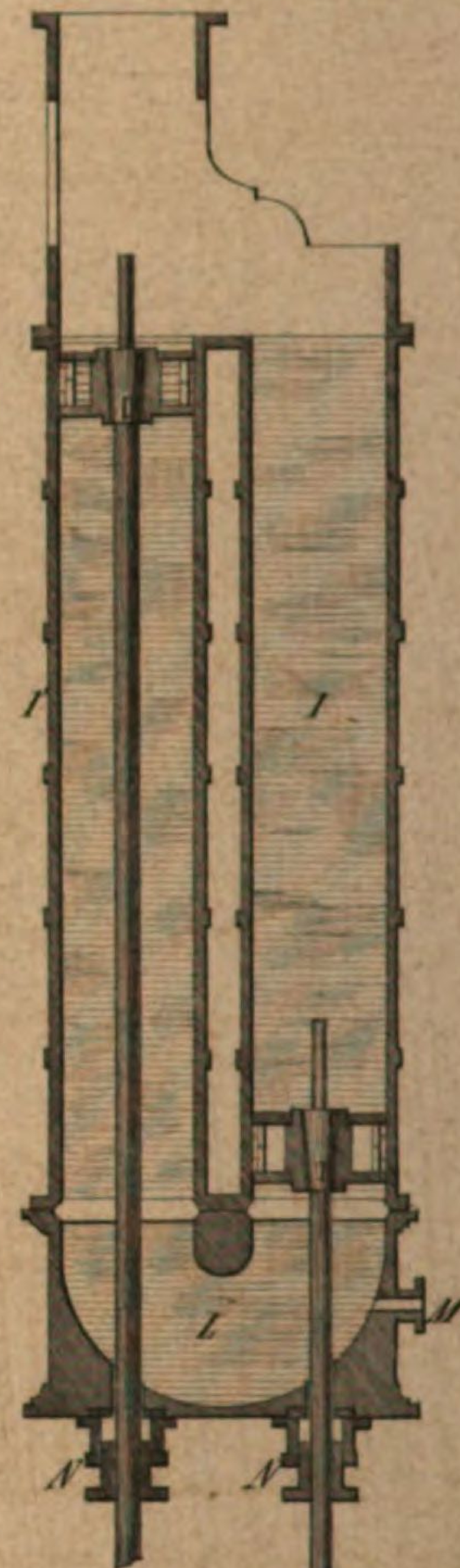
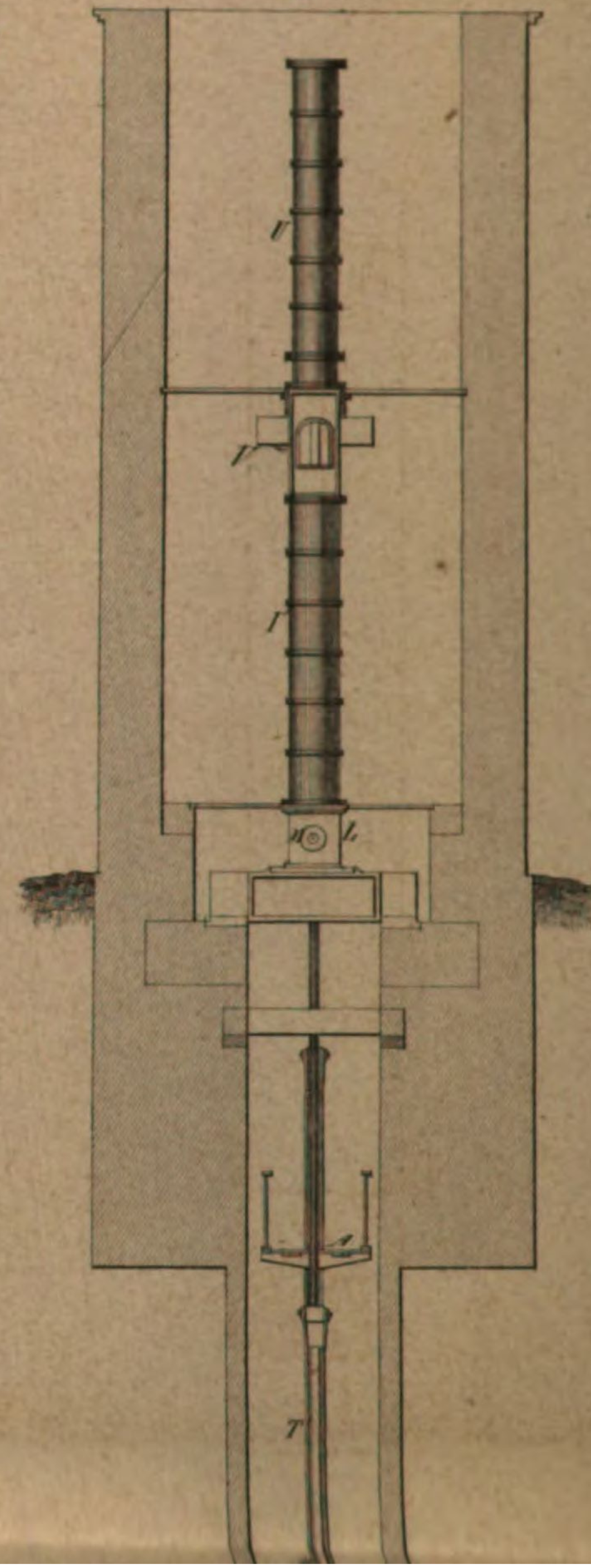


Fig. 2.



Wasserkübel

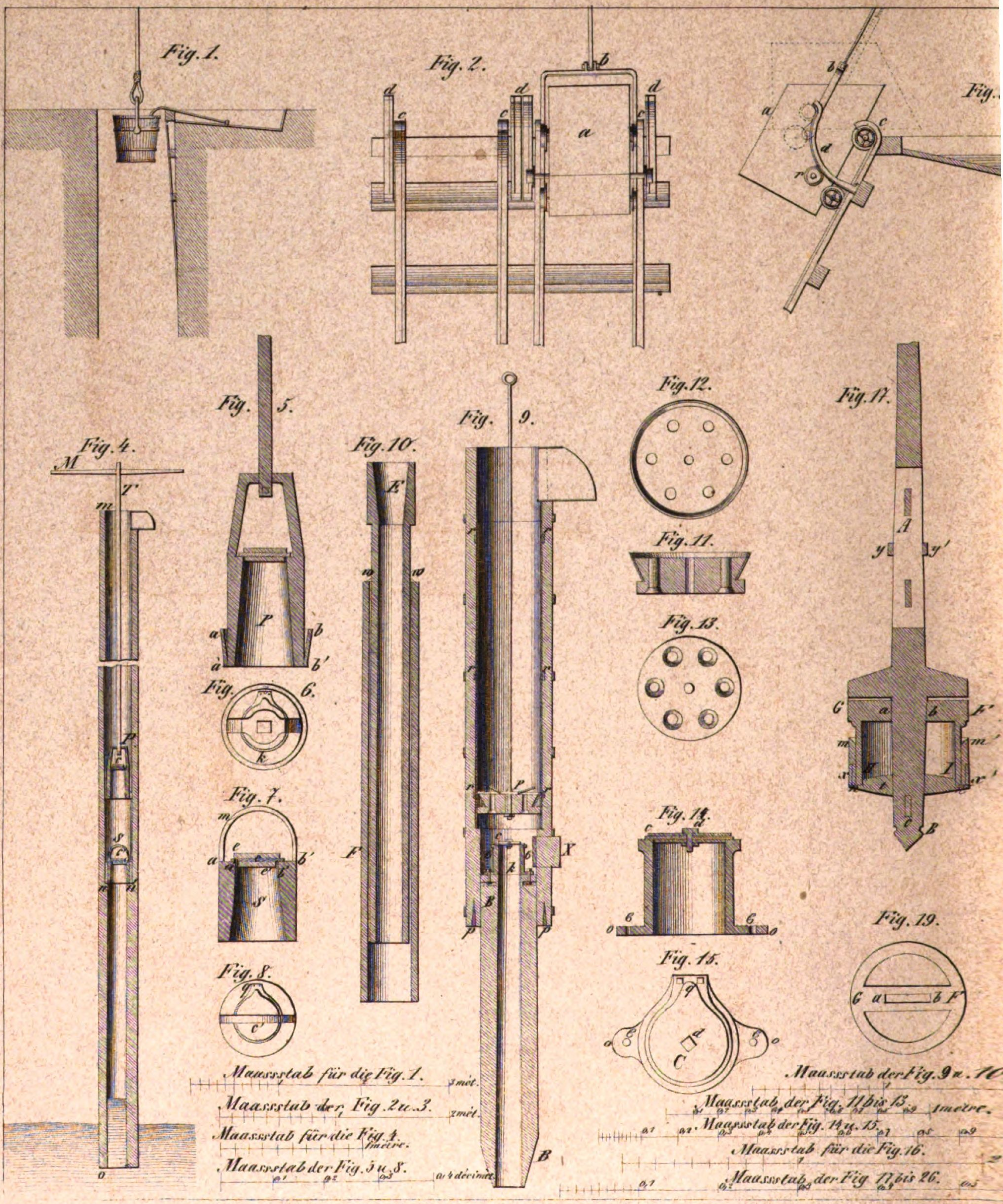


Fig. 3.

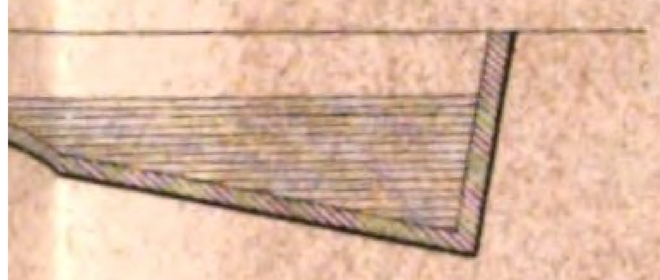


Fig. 16.

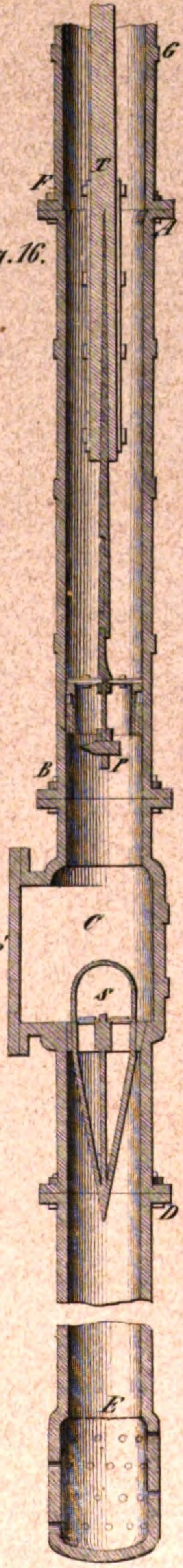


Fig. 18.

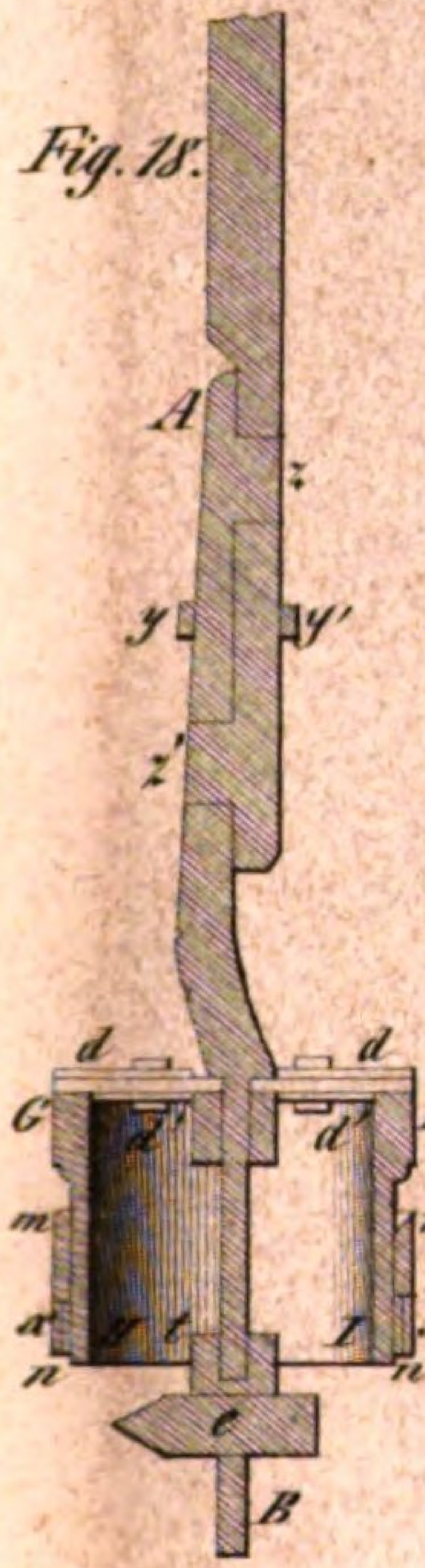


Fig. 20.

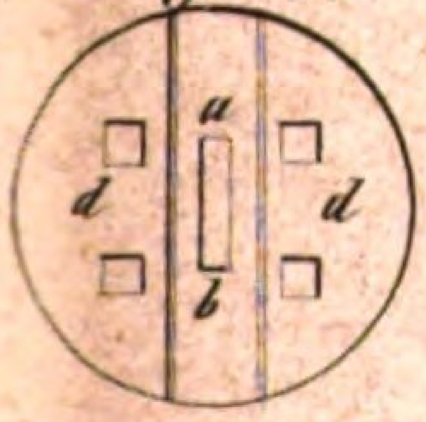


Fig. 21.



2mèt.

nière.

res.

0,6 décim.

Fig. 22.

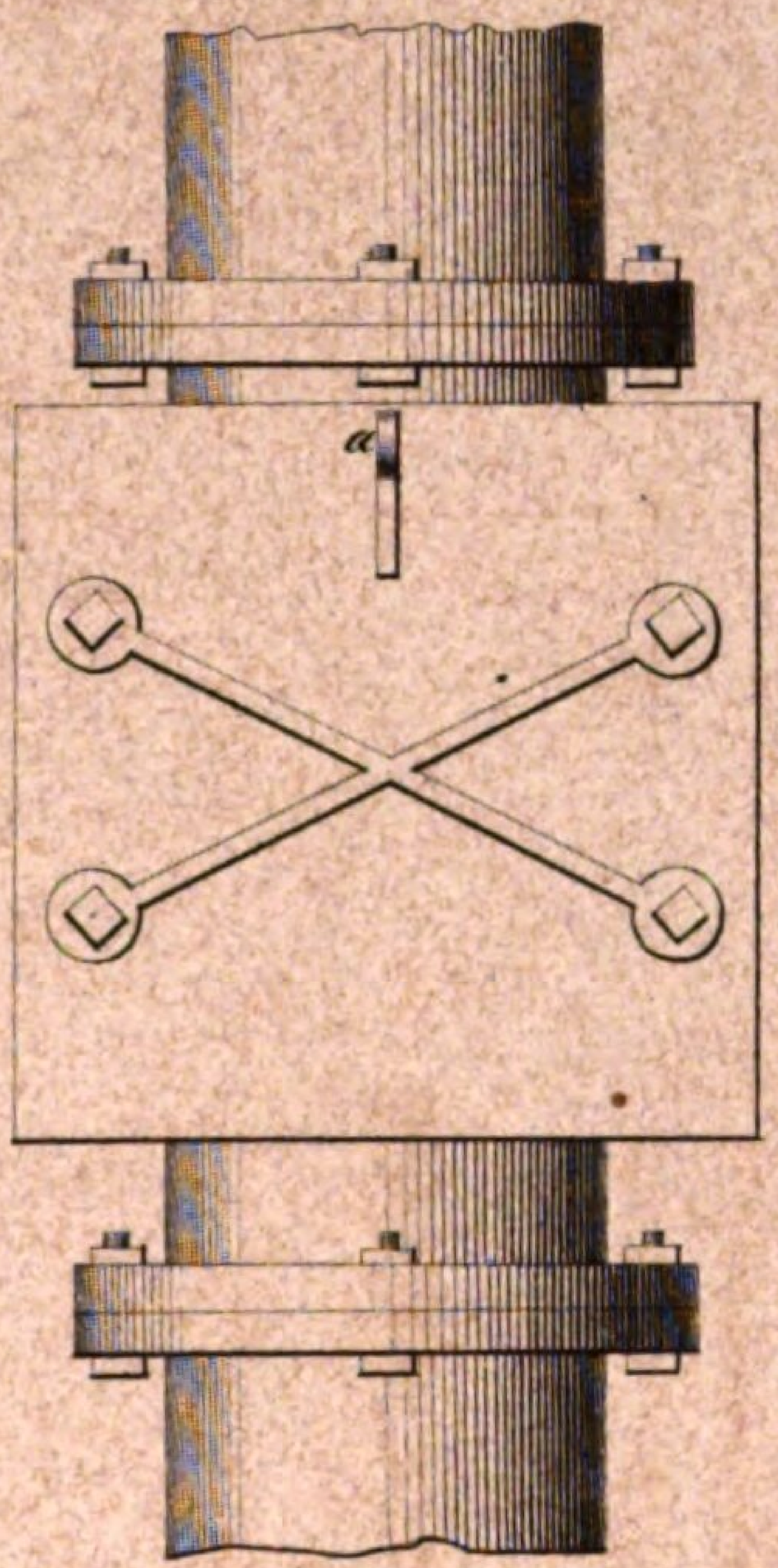


Fig. 23.

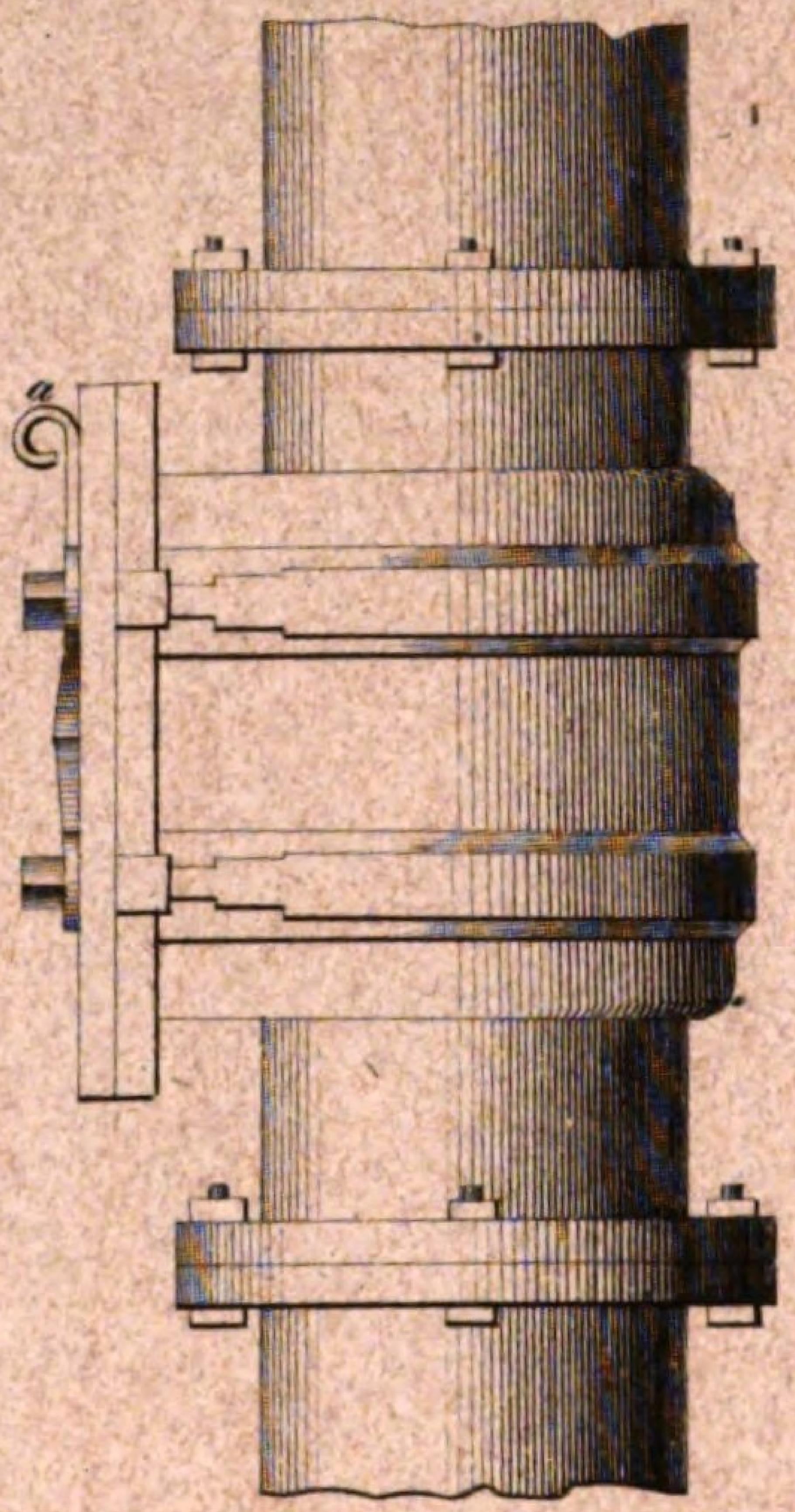


Fig. 24.

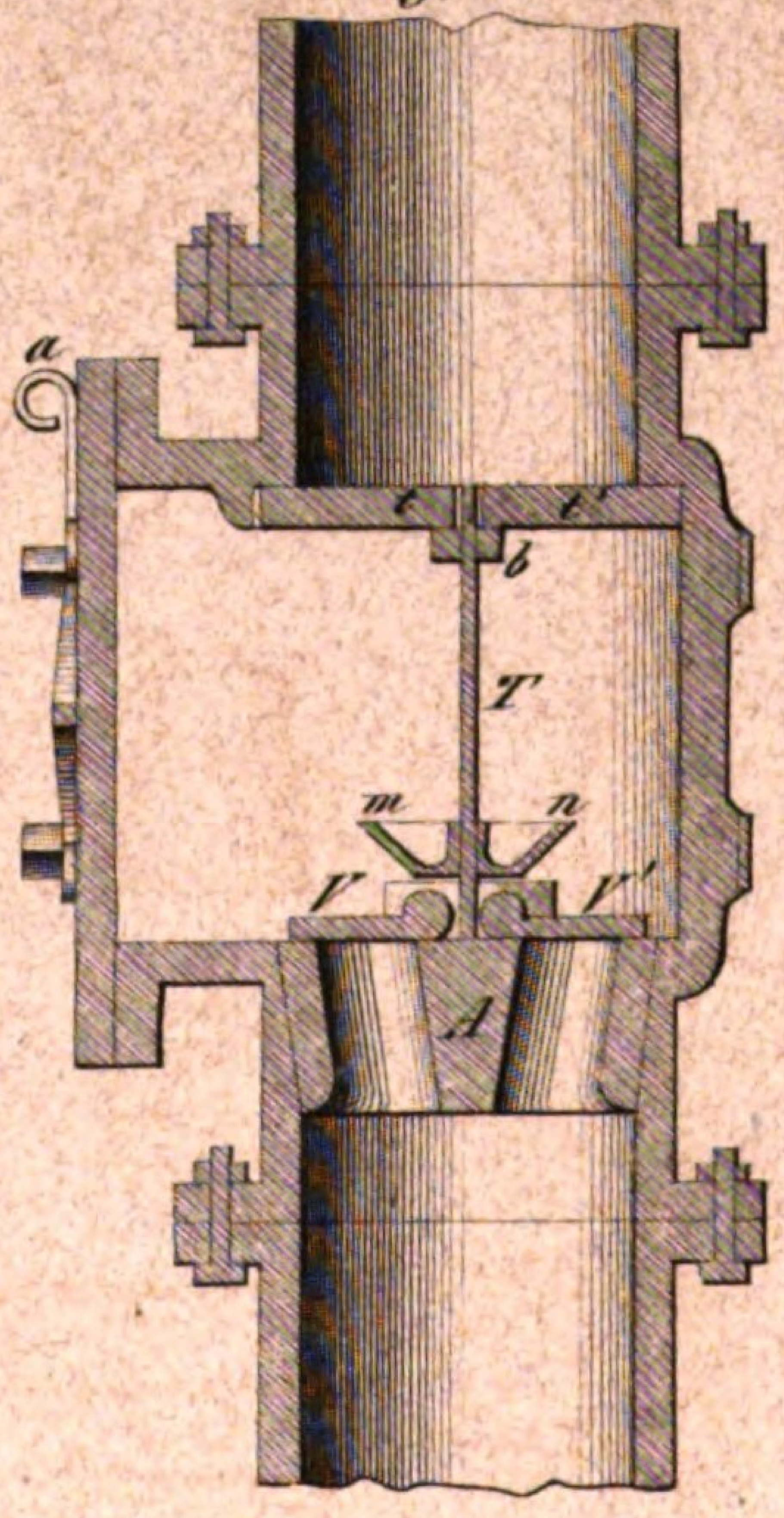


Fig. 25.

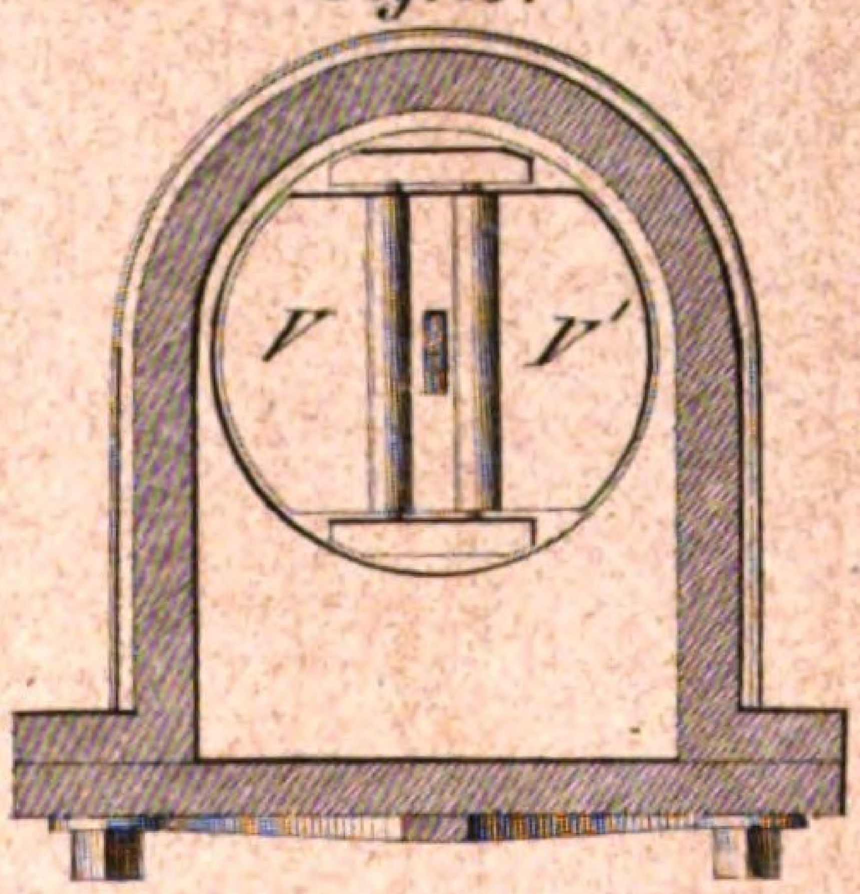
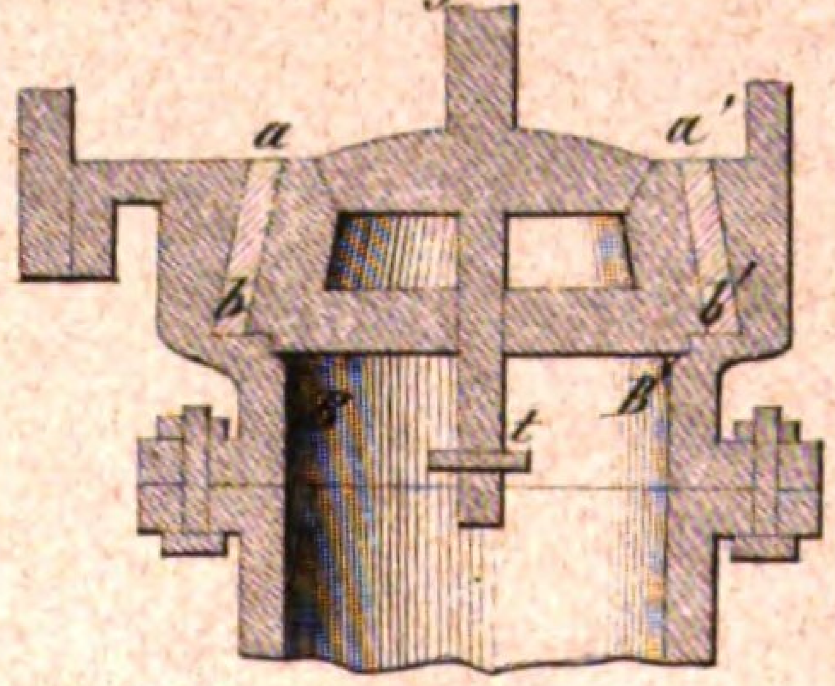
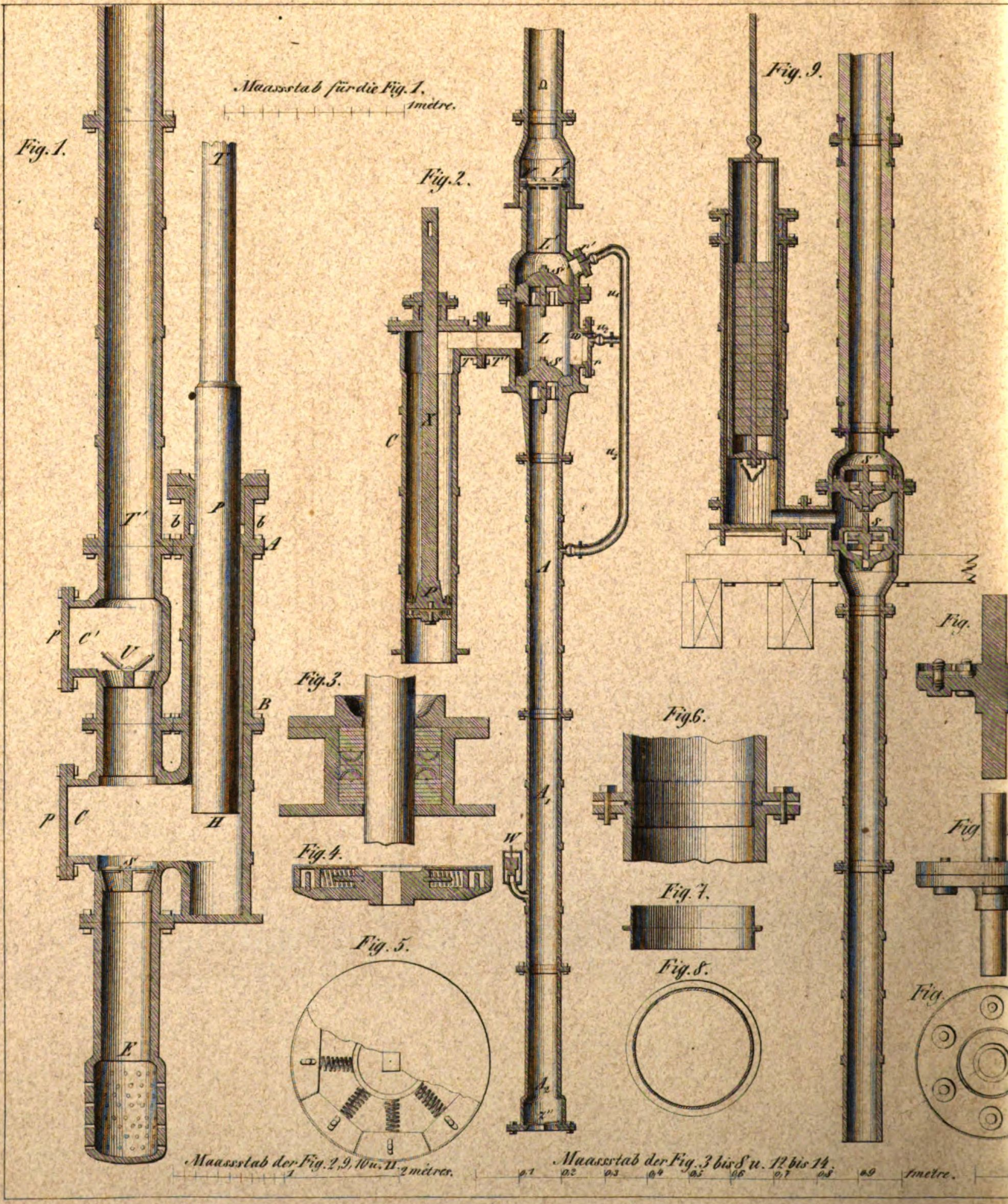


Fig. 26.



Kunst



Maassstab für die Fig. 1.
1 mètre.
Fig. 1.
Fig. 2.
Fig. 3.
Fig. 4.
Fig. 5.
Fig. 6.
Fig. 7.
Fig. 8.
Fig. 9.
Maassstab der Fig. 2, 9, 10 u. 11.
2 mètres.
Maassstab der Fig. 3 bis 8 u. 12 bis 14.
1 mètre.

Fig. 10.

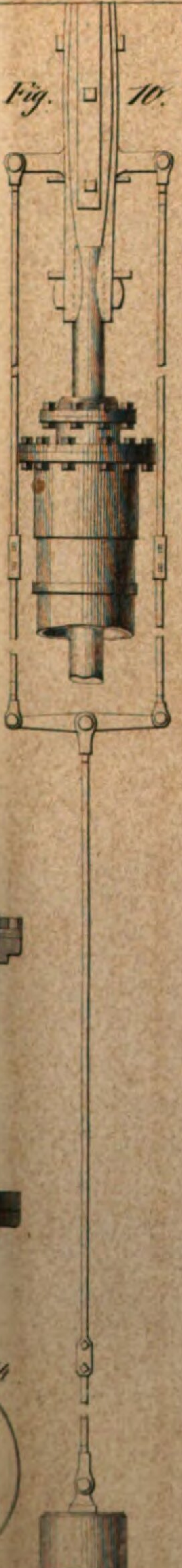


Fig. 11.



12.
13.
14.



Fig. 15.

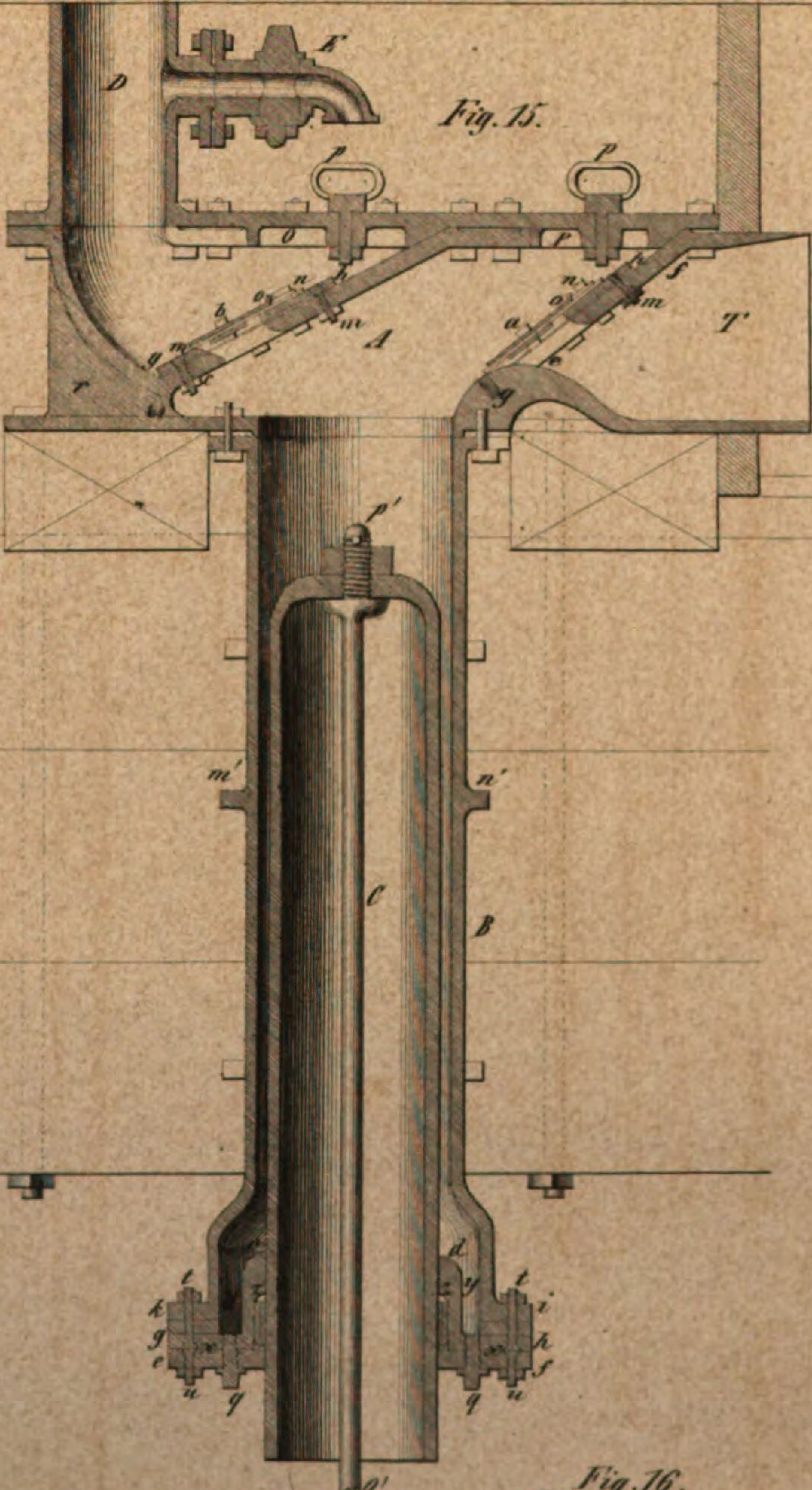
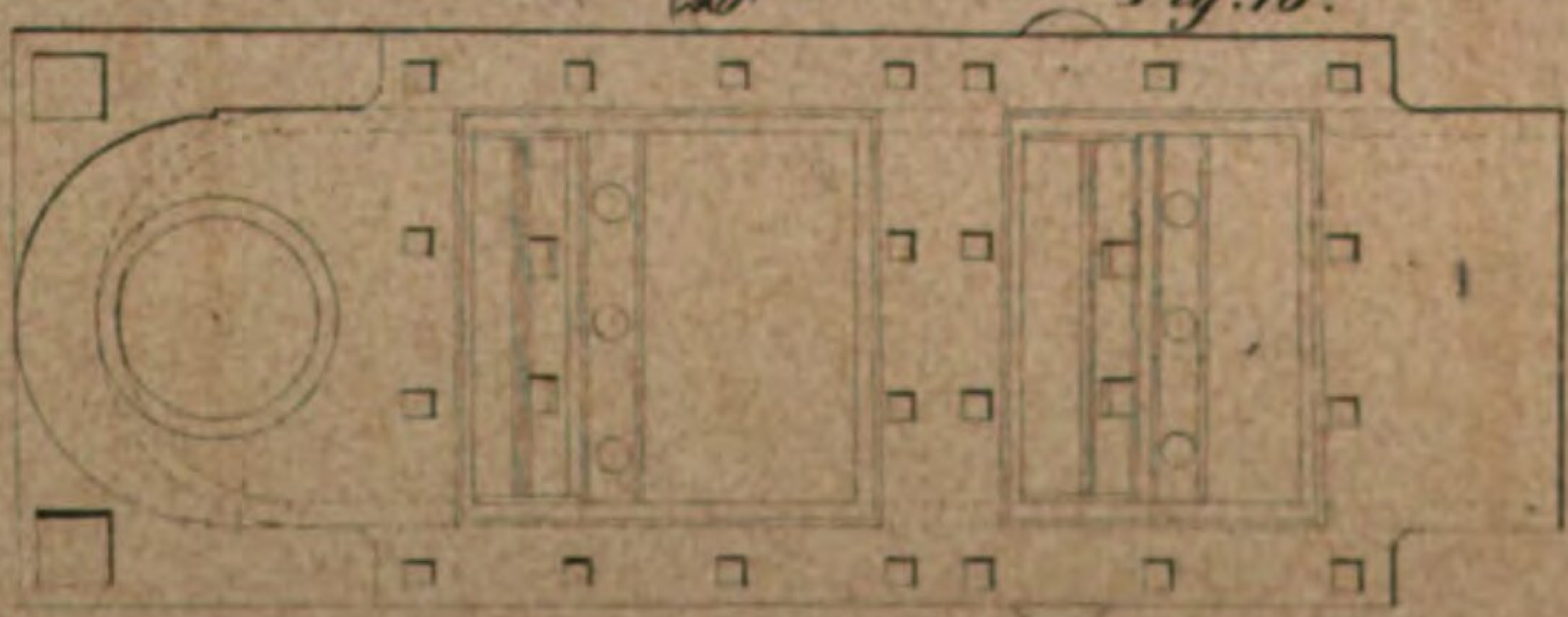
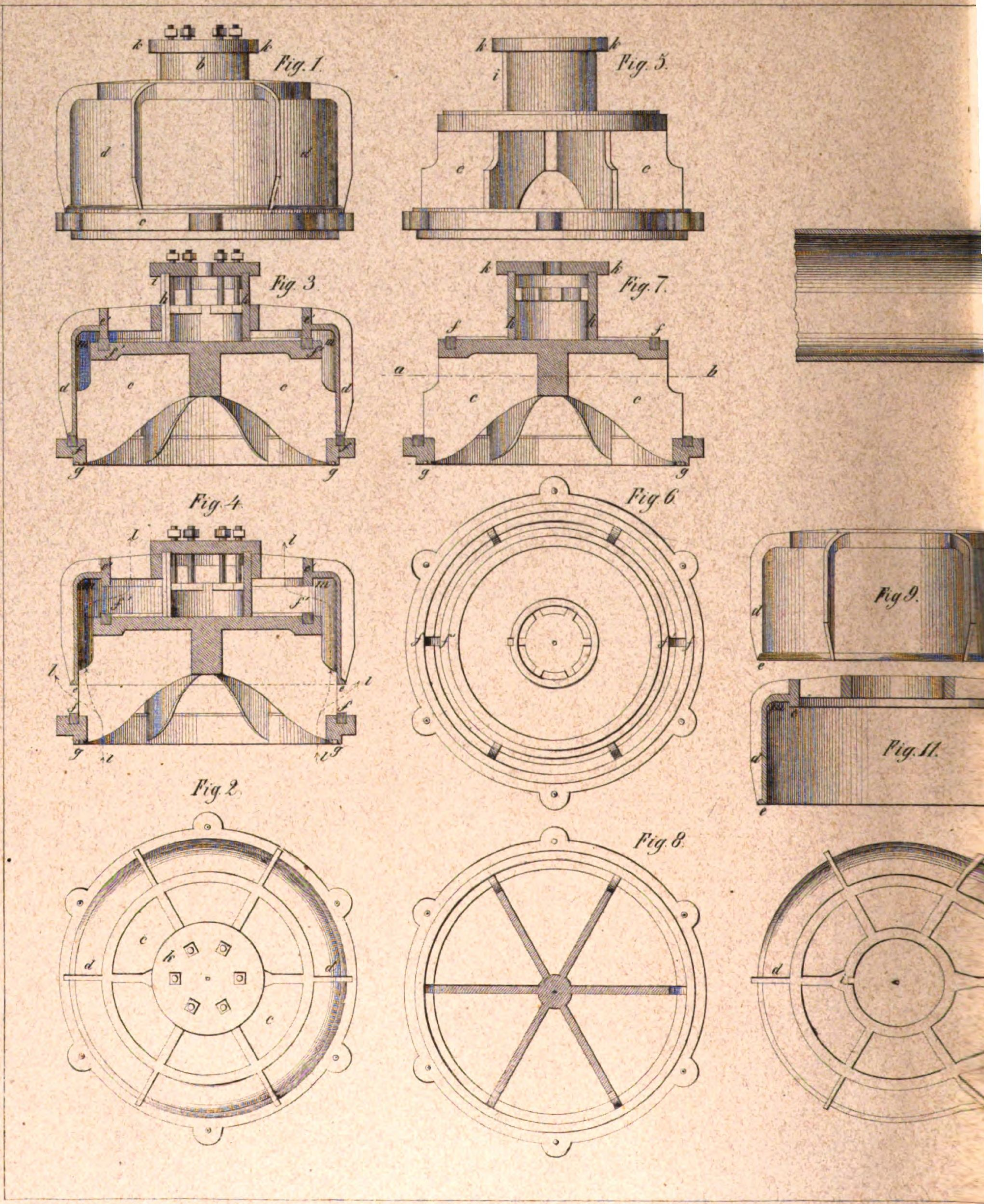
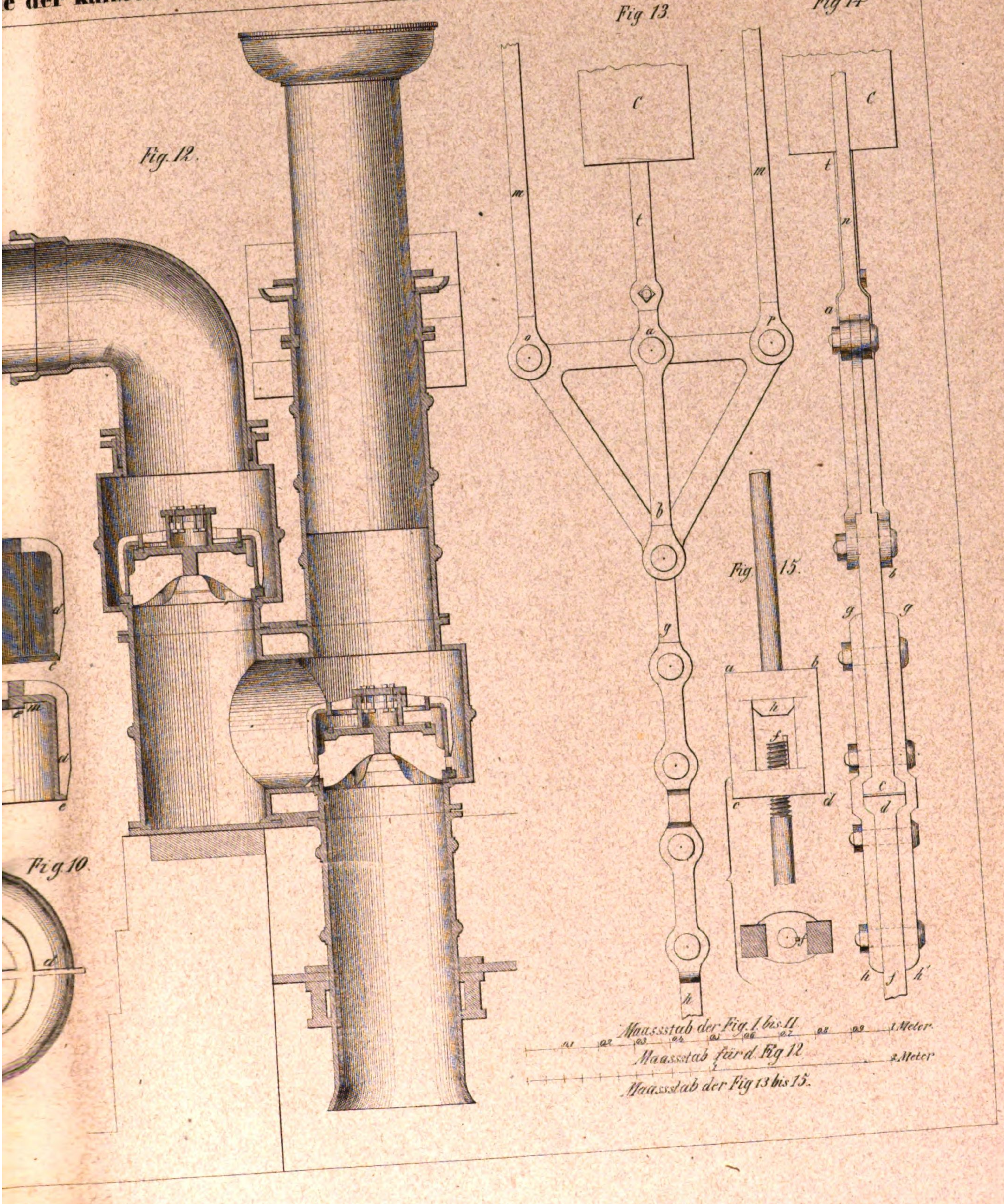


Fig. 16.

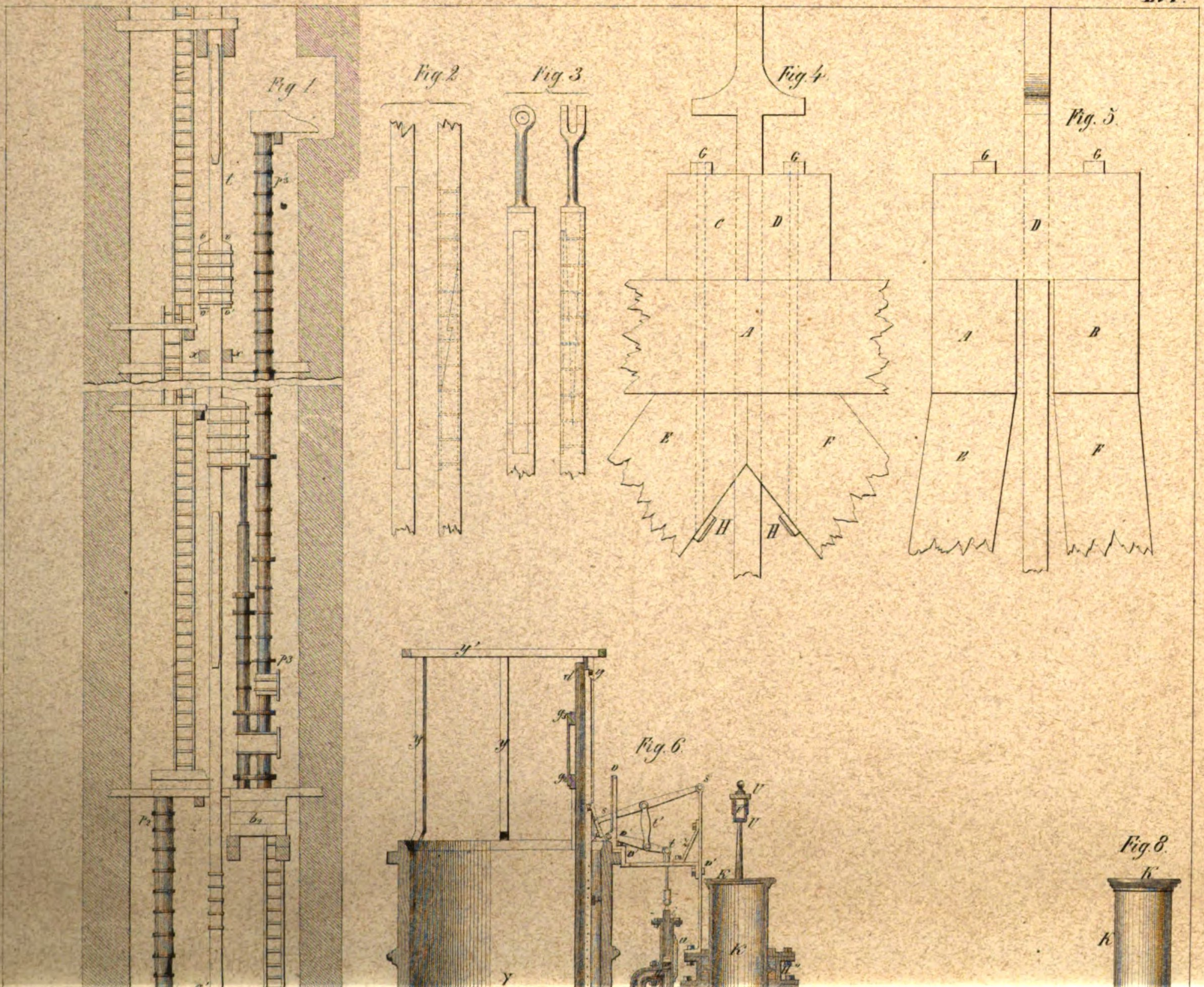


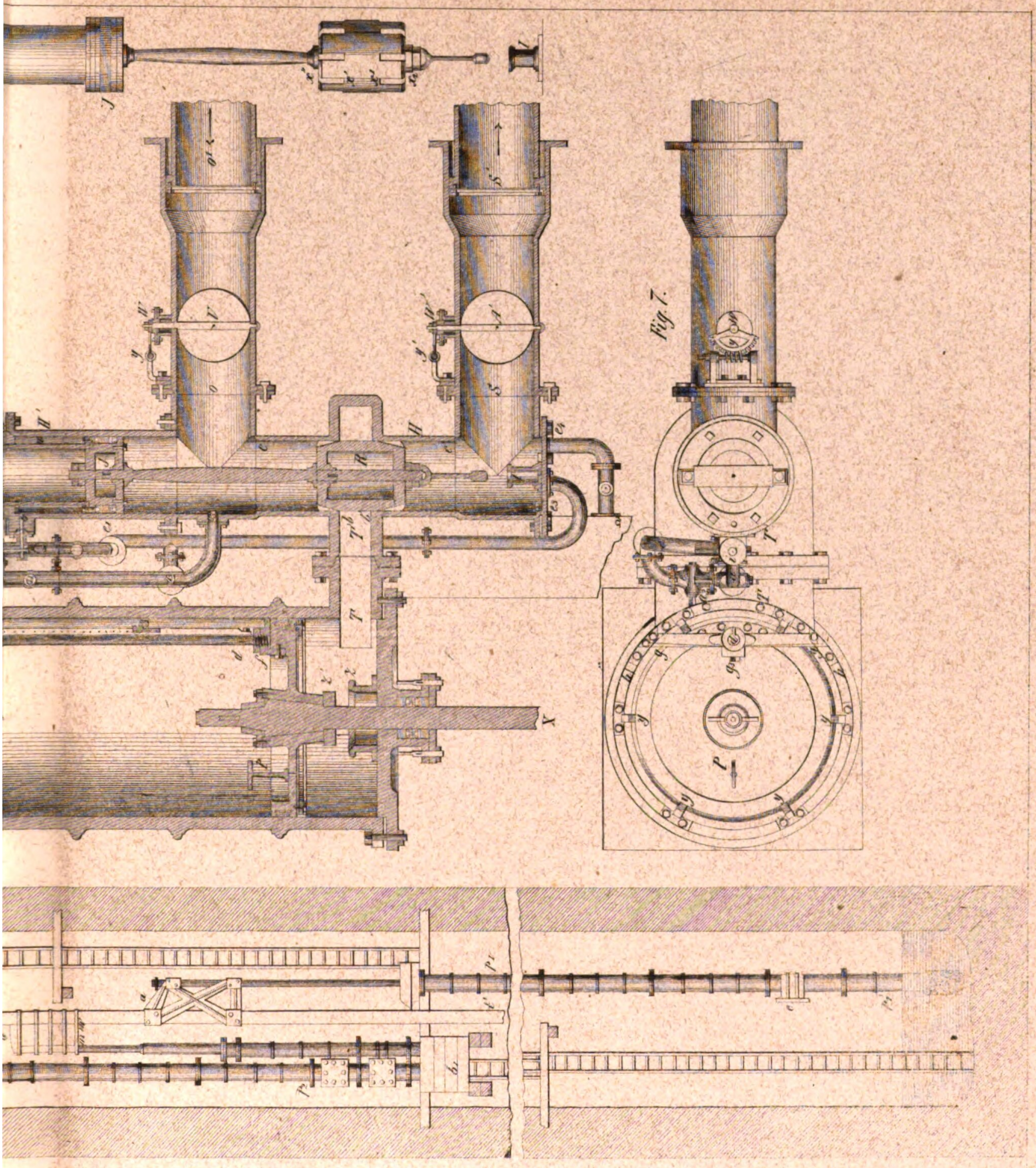
Maassstab der Fig. 15 u. 16.
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1 Meter.


Fig. 1.
Fig. 5.
Fig. 3.
Fig. 7.
Fig. 4.
Fig. 6.
Fig. 9.
Fig. 11.
Fig. 2.
Fig. 8.

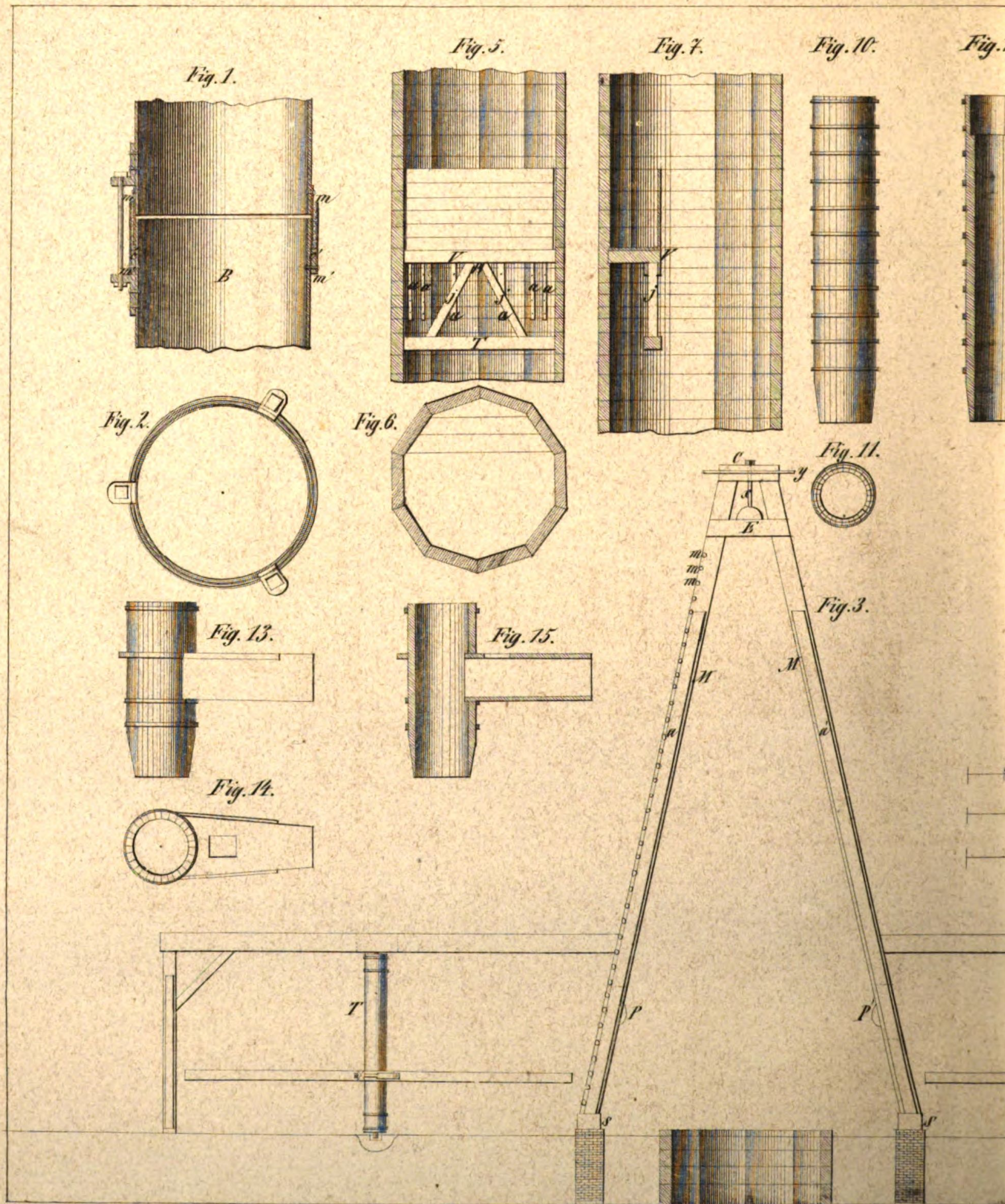

Fig. 12.
Fig 13.
Fig 14.
Fig 15.
Fig 10.
Maassstab der Fig. 1 bis 11.
1 Meter.
Maassstab für d. Fig 12.
2 Meter.
Maassstab der Fig 13 bis 15.

Tiefer Kunstschacht mit den Sätzen. Wasserfäulenmaschine.




Fig. 7.

Kunstsätze beim



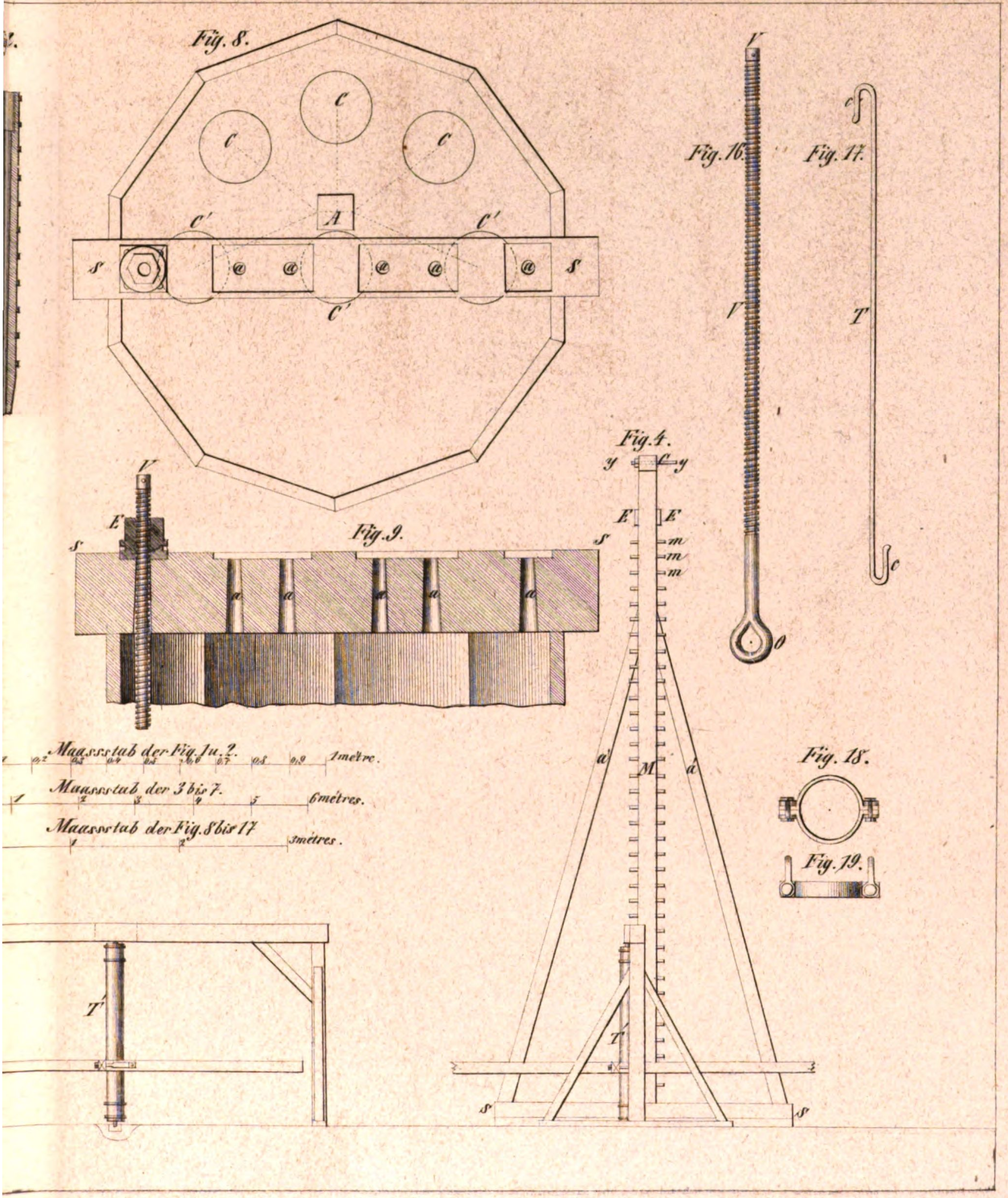


Fig. 8.
Fig. 9.
Fig. 4.
Fig. 16.
Fig. 17.
Fig. 18.
Fig. 19.
Maasstab der Fig. 1 u. 2.
1 metre.
Maasstab der 3 bis 7.
6 mètres.
Maasstab der Fig. 8 bis 17
3 mètres.

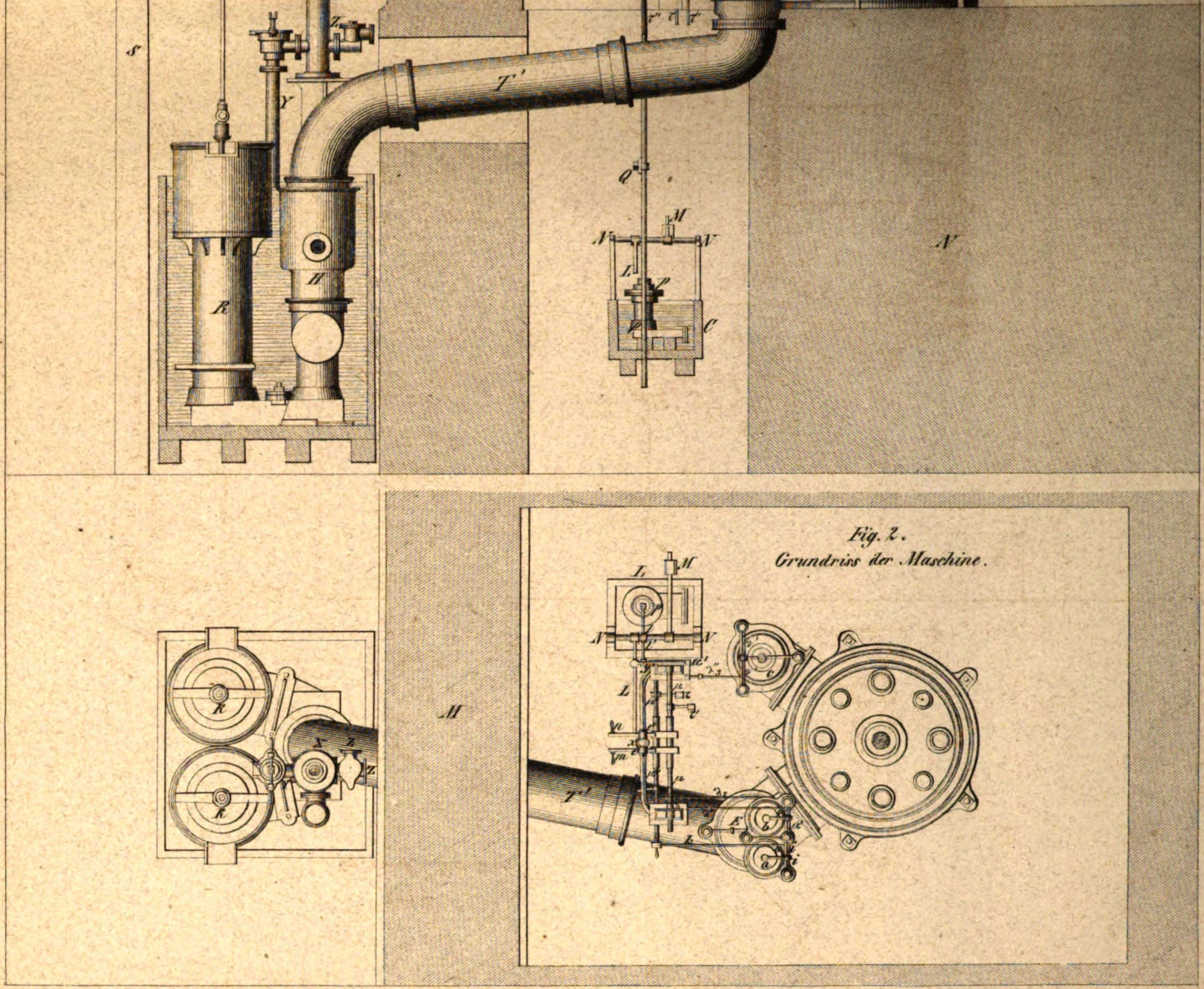
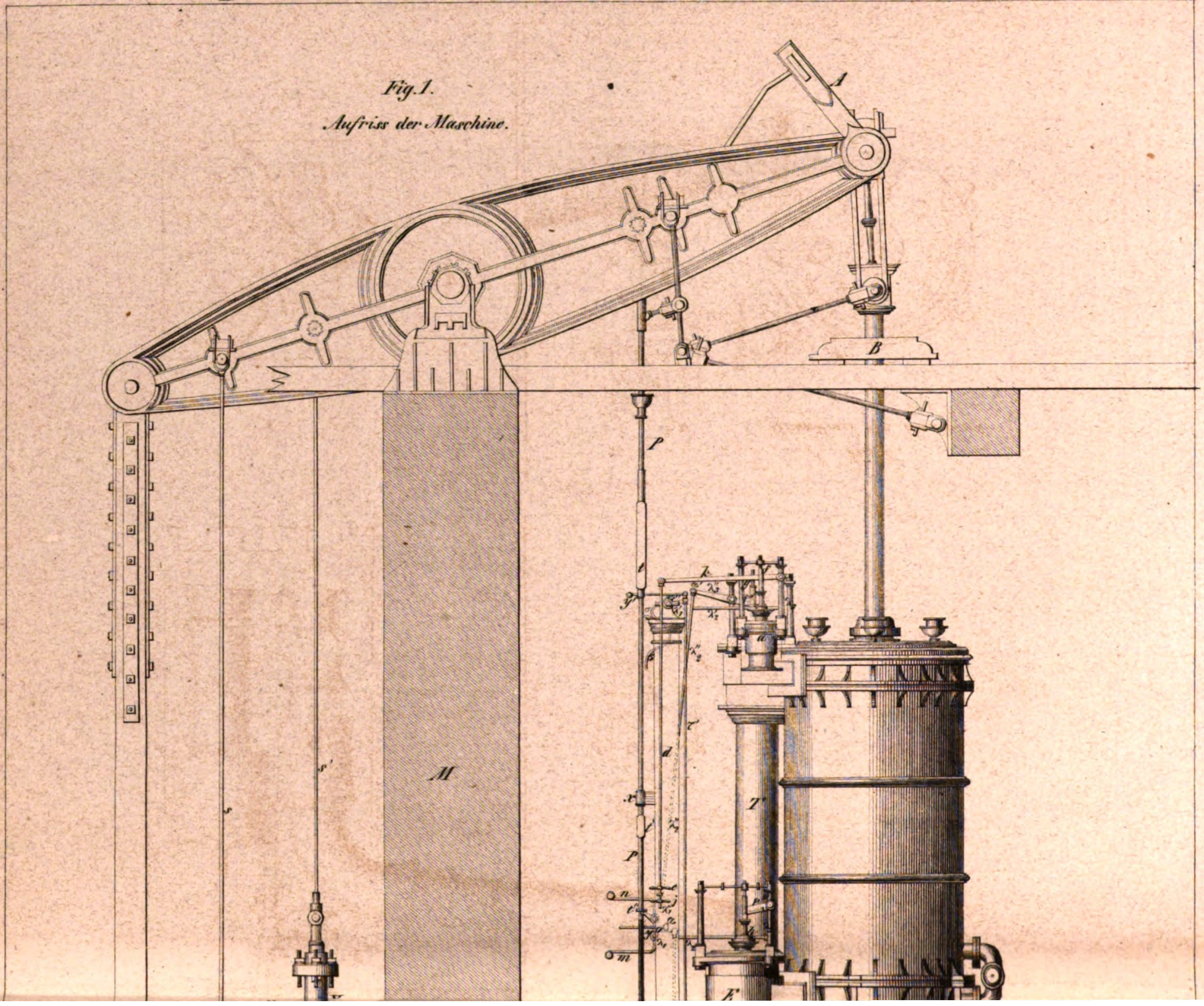


Fig. 2.
Grundriss der Maschine.

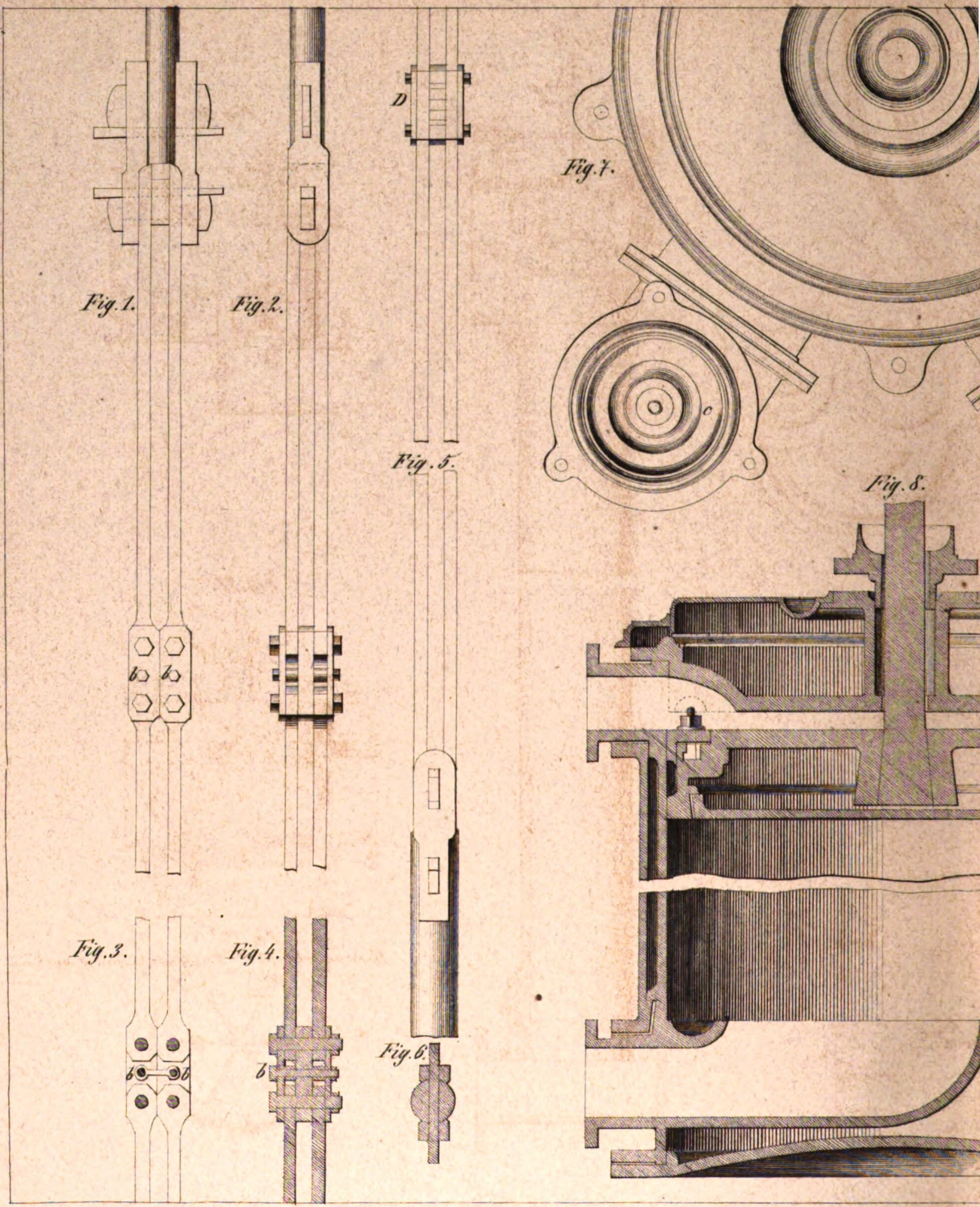
Dampfmaschine auf den Consolidirten Gruben in Cornwall. *LIX.*

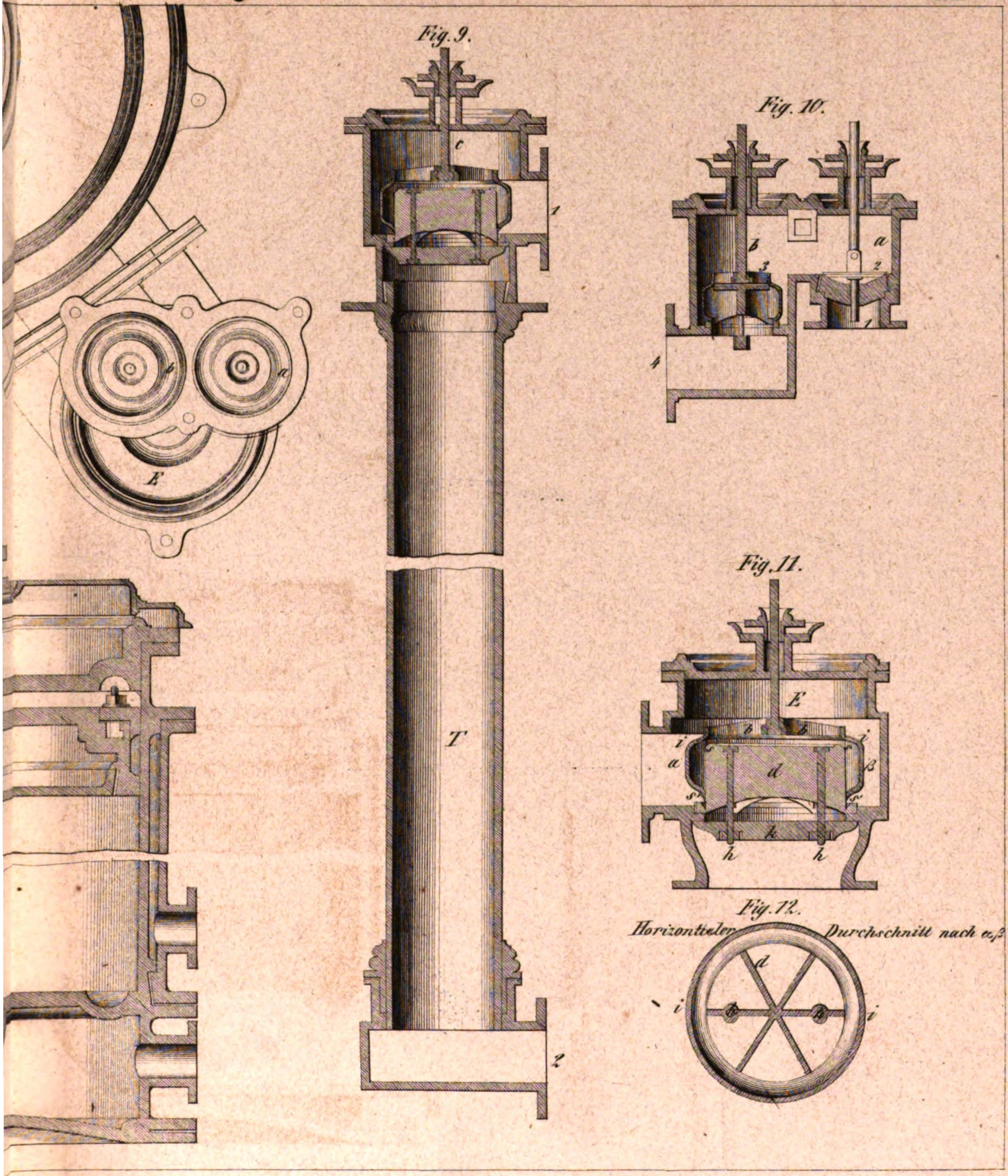
Fig. 1.

Aufriss der Maschine.

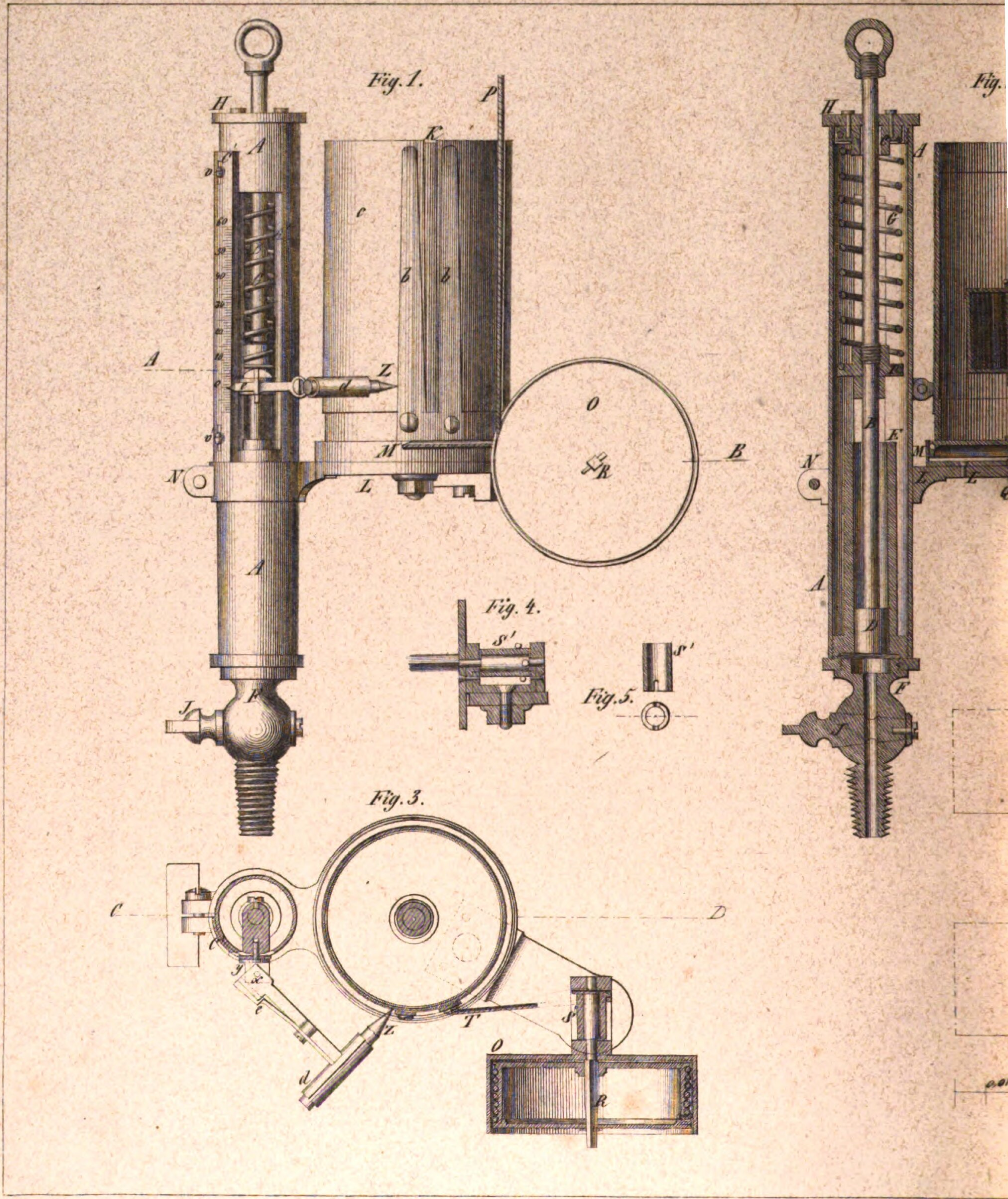


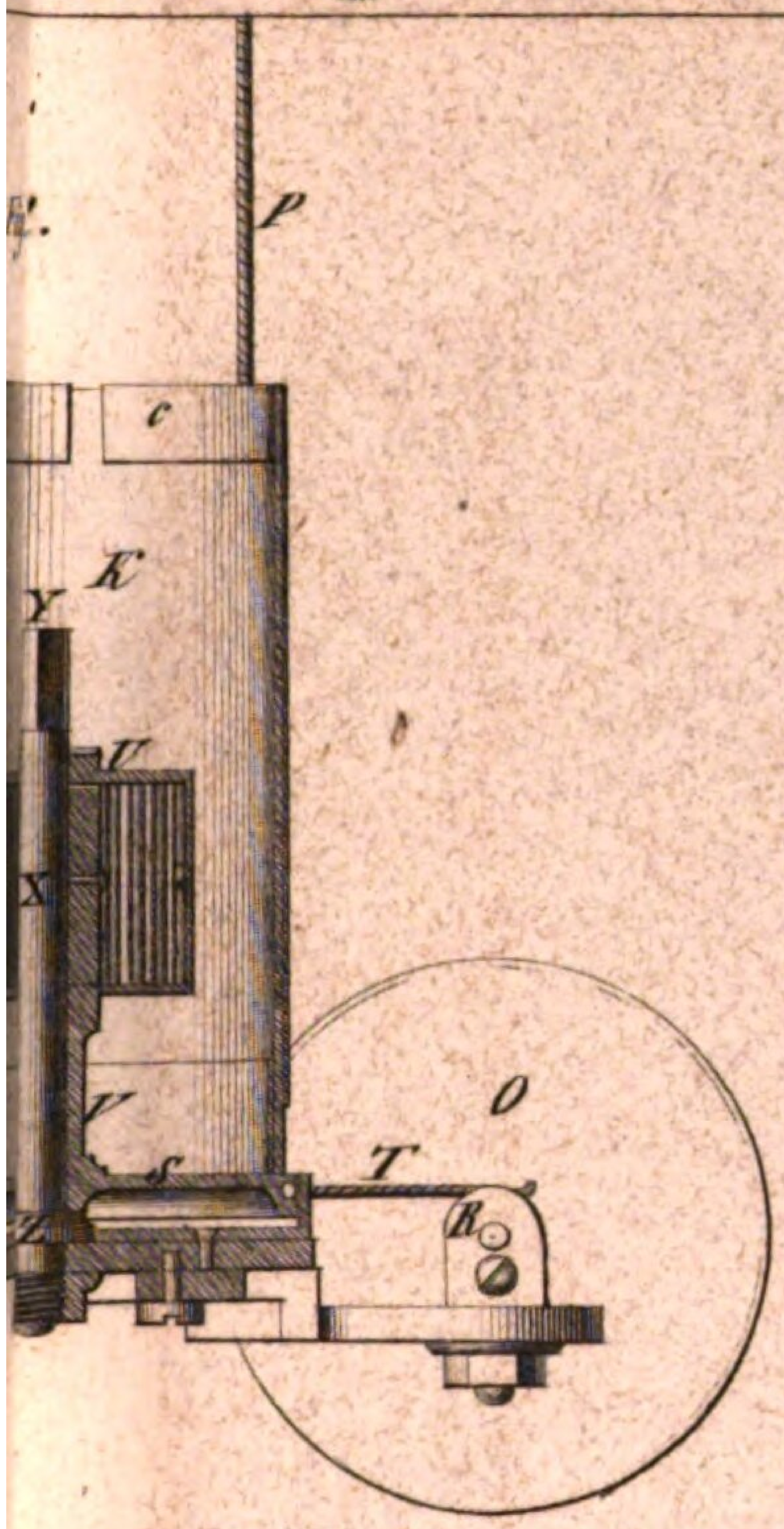
Enzelne Teile der Cornwall




Fig. 9.
c
1
T
2
Fig. 10.
b
a
3
2
1
4
Fig. 11.
E
d
a
β
h
h
Fig. 12.
Horizontaler Durchschnitt nach α,β
d
i
i
E

Feder=Indicato





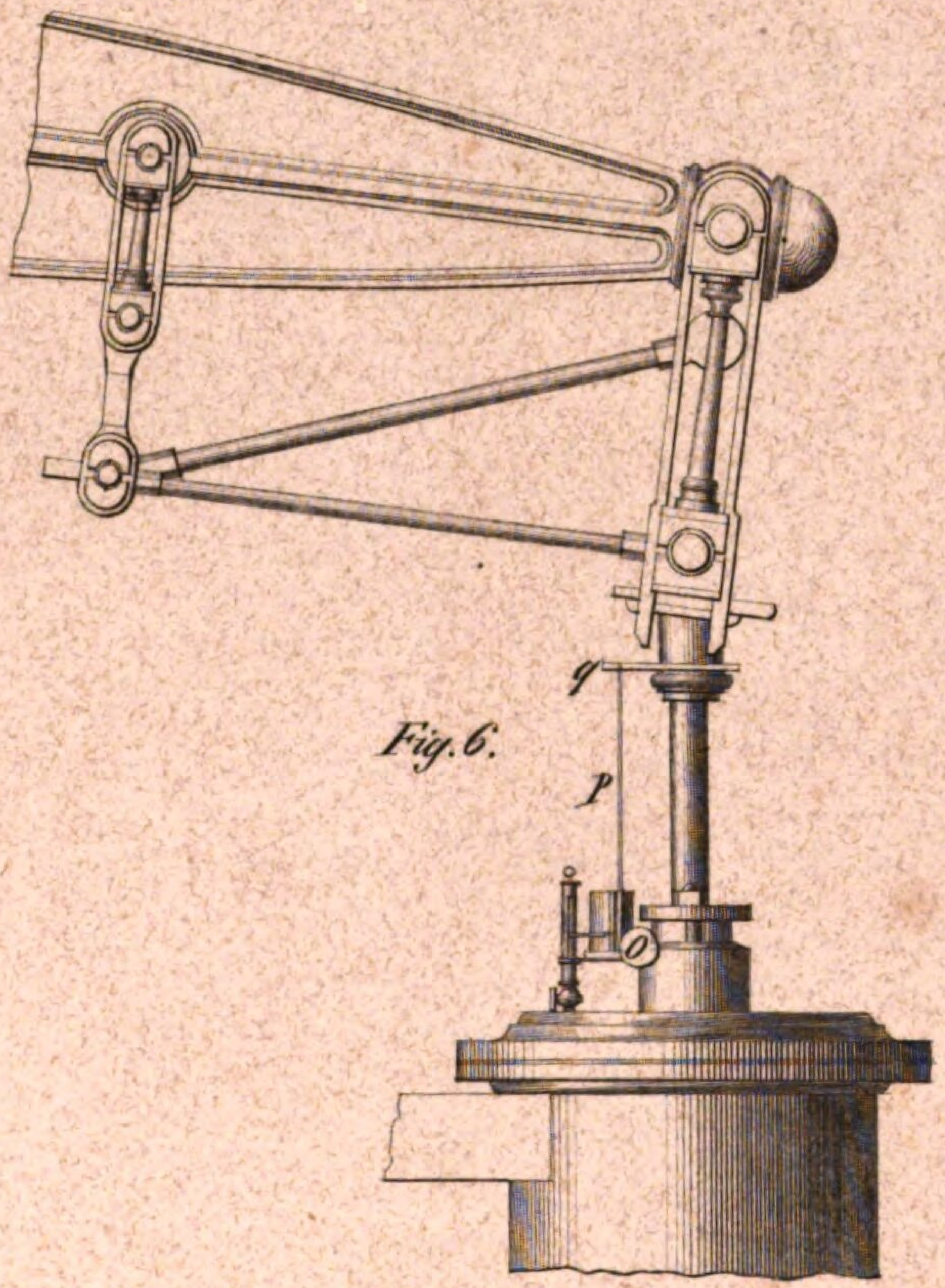


Fig. 6.

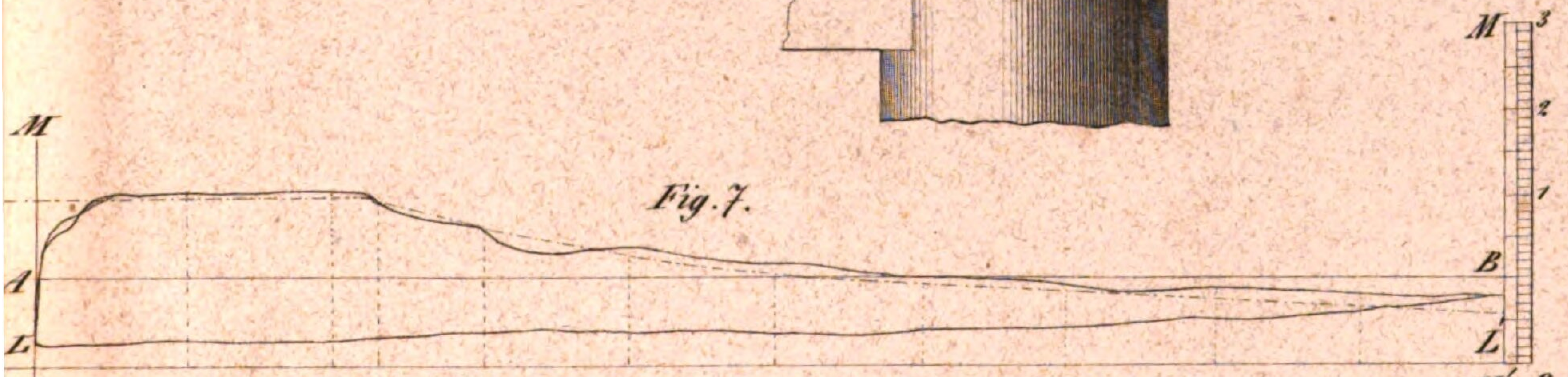


Fig. 7.

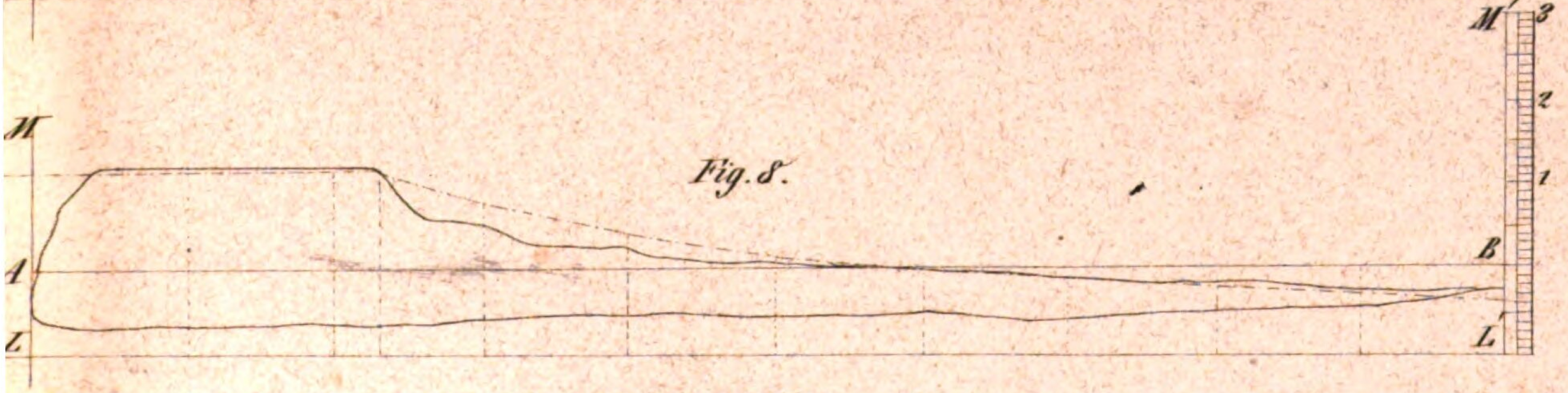
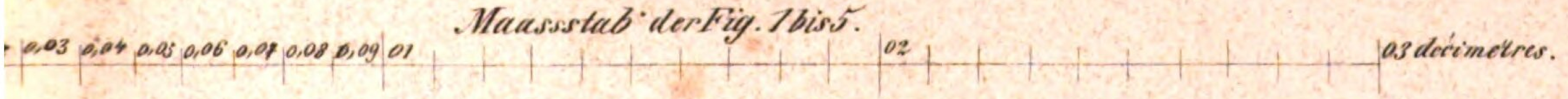
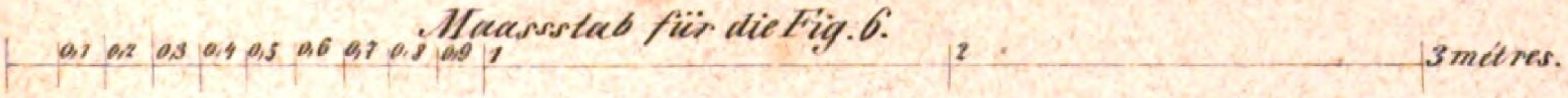


Fig. 8.

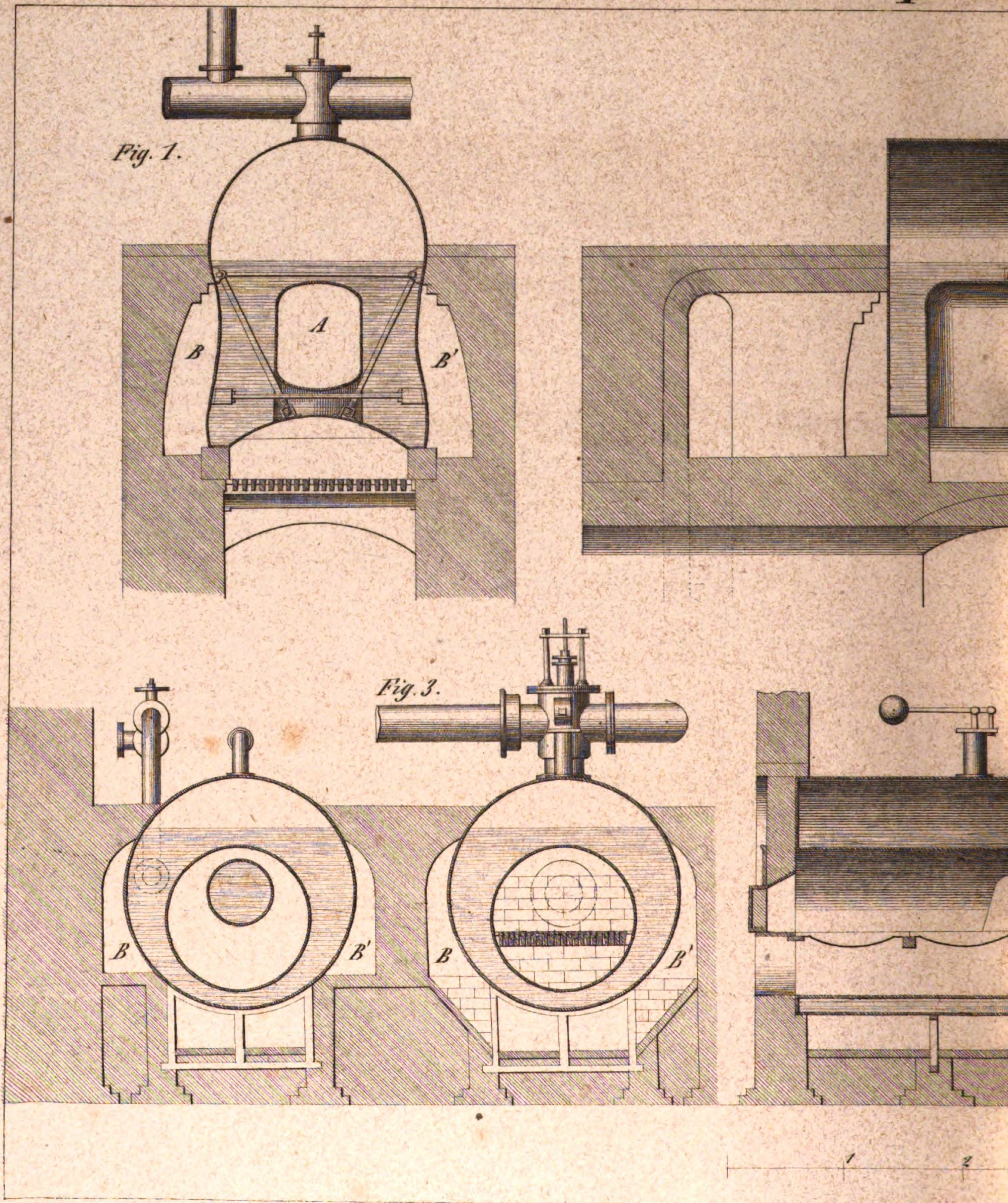
Maassstab der Fig. 1 bis 5.

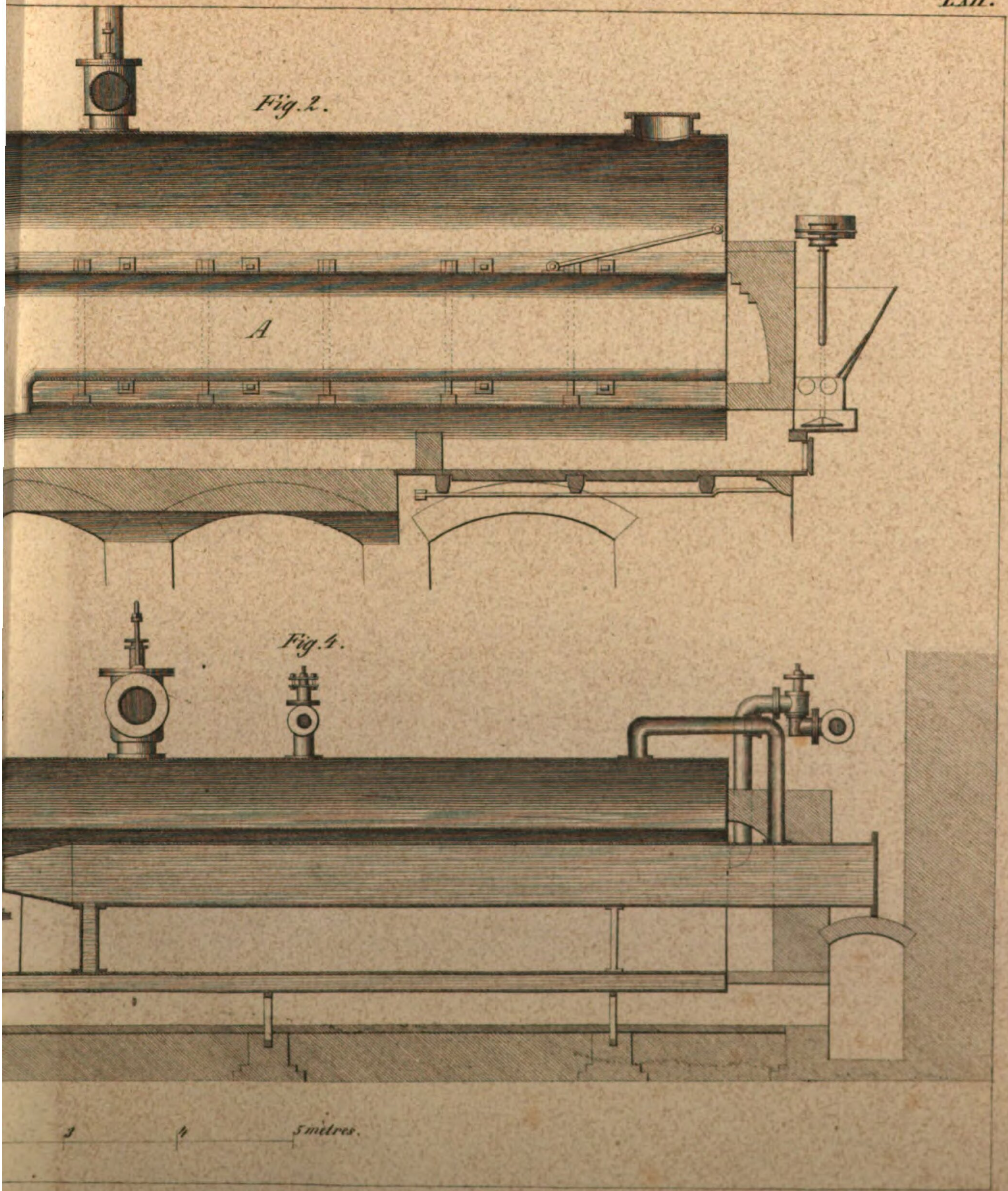


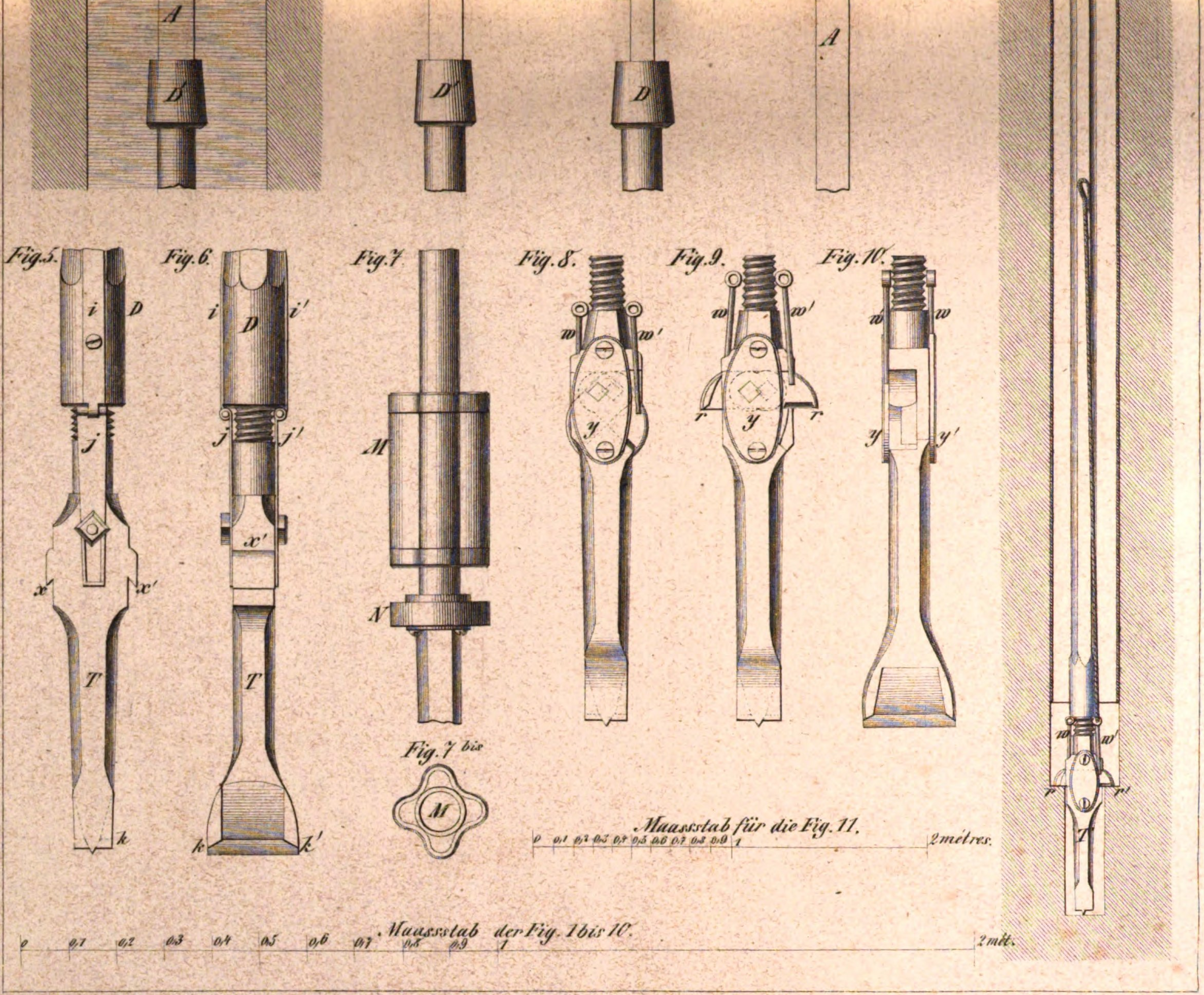
Maassstab für die Fig. 6.



Dampfmasch




Fig. 2.
A
Fig. 4.
3
4
5 mètres.


Fig. 5.
Fig. 6.
Fig. 7.
Fig. 8.
Fig. 9.
Fig. 10.
Fig. 7 bis
Maassstab für die Fig. 11.
2 mètres.
Maassstab der Fig. 1 bis 10.
2 mèt.

Neue Bohrwerkzeuge von Kind.

Fig. 1. Fig. 2. Fig. 3. Fig. 4.

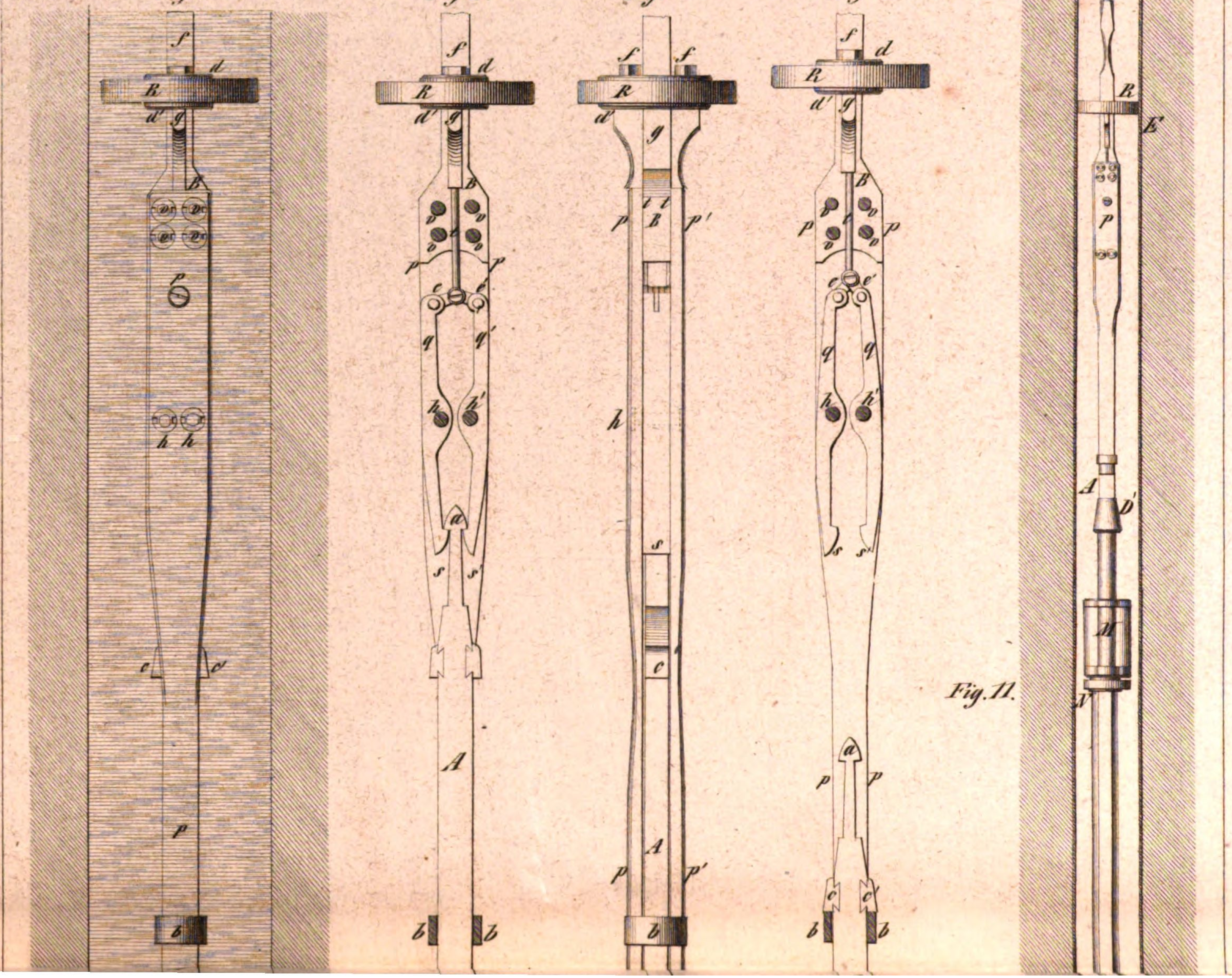


Fig. 11.

Bayerische Staatsbibliothek MÜNCHEN

BSB Bayerische StaatsBibliothek
MDZ Münchener DigitalisierungsZentrum Digitale Bibliothek

Combes, Charles Pierre Mathieu,

Handbuch der Bergbaukunst oder die Lehre von der Aufsuchung und Gewinnung der nutzbaren Mineralien mit einem Atlas ...

Bd.: [3]

Weimar 1846

4 Metall. 65 s-3
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